

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: 2021/12/09

S01 System Check_H2450_211209

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

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

Medium: H19T27N1_1209 Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 1.851$ S/m; $\epsilon_r = 38.205$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(7.49, 7.49, 7.49) @ 2450 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: ELI Phantom_2105; Type: QD OVA 004 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

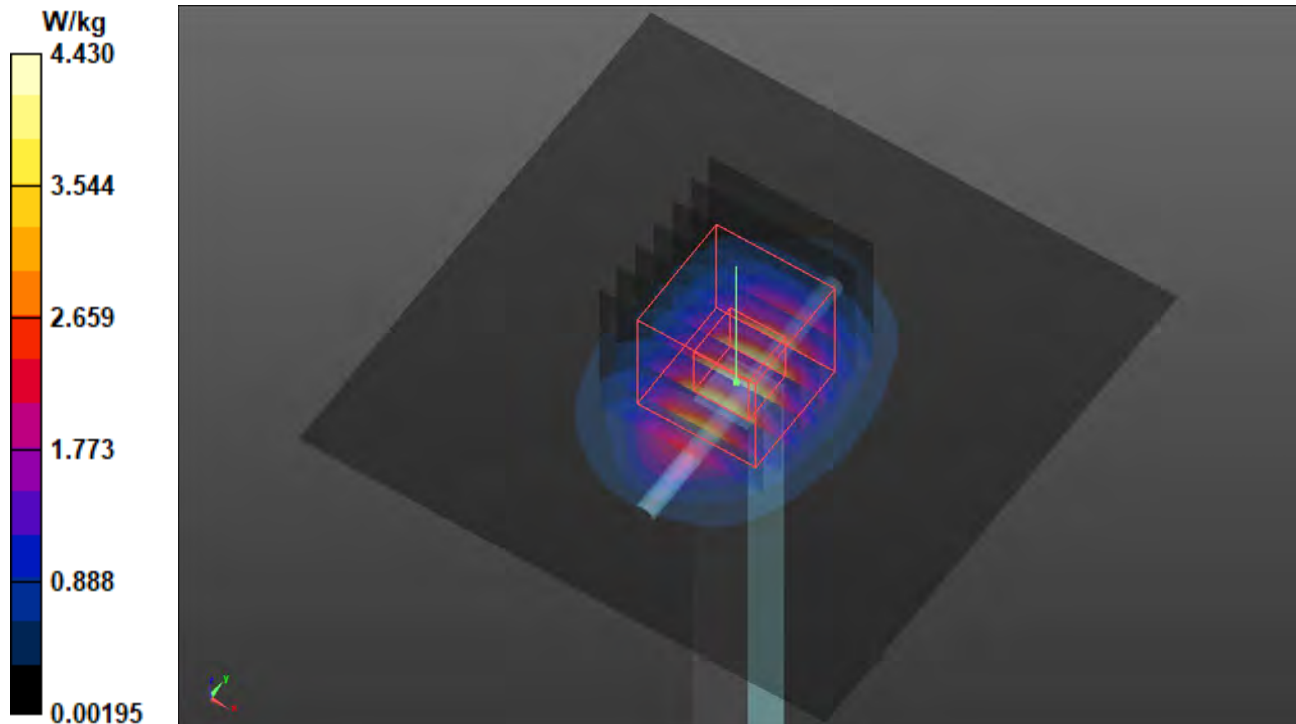
Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 4.43 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.83 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 5.64 W/kg

SAR(1 g) = 2.57 W/kg; SAR(10 g) = 1.21 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.47 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2021/12/09

S02 System Check_H5250_211209

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

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

Medium: H34T60N1_1209 Medium parameters used (interpolated): $f = 5250$ MHz; $\sigma = 4.741$ S/m; $\epsilon_r = 36.971$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(5.5, 5.5, 5.5) @ 5250 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

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

Maximum value of SAR (interpolated) = 10.2 W/kg

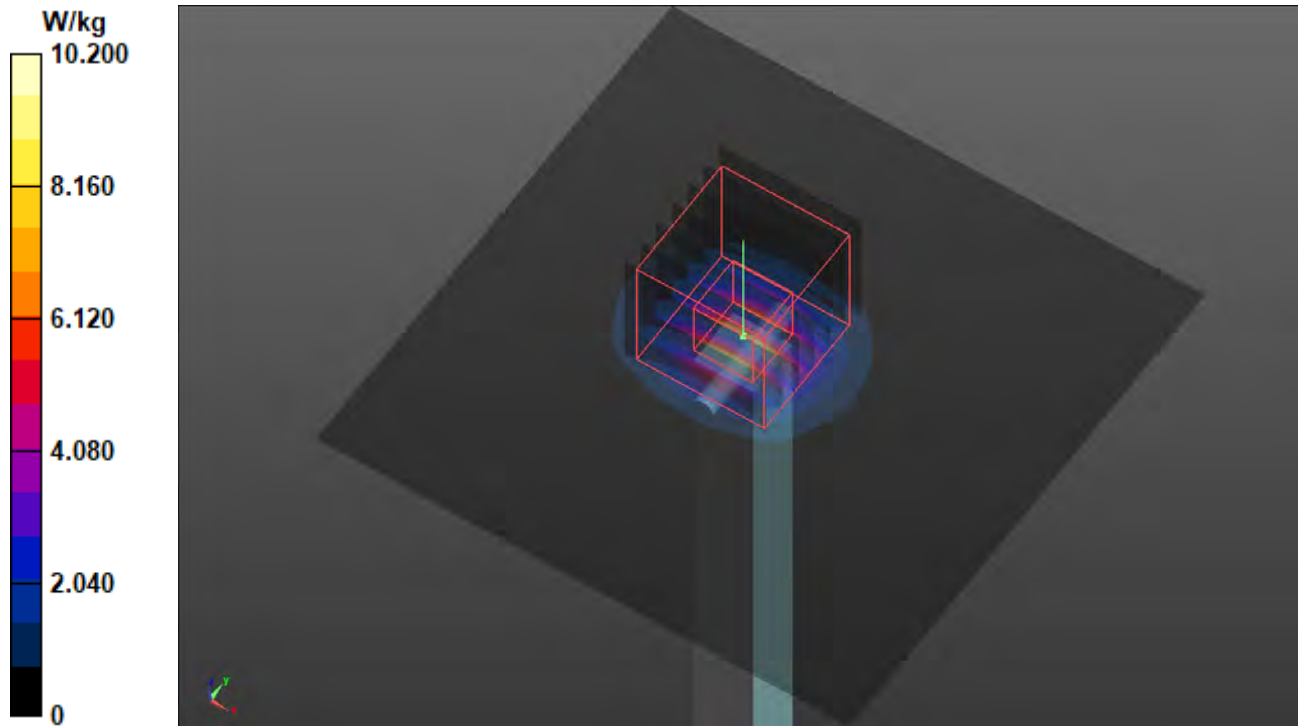
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 41.69 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 14.9 W/kg

SAR(1 g) = 3.95 W/kg; SAR(10 g) = 1.18 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 9.65 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2021/12/10

S03 System Check_H5600_211210

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

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

Medium: H34T60N1_1210 Medium parameters used: $f = 5600$ MHz; $\sigma = 5.122$ S/m; $\epsilon_r = 34.349$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C ; Liquid Temperature : 23.1°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(4.8, 4.8, 4.8) @ 5600 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

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

Maximum value of SAR (interpolated) = 11.1 W/kg

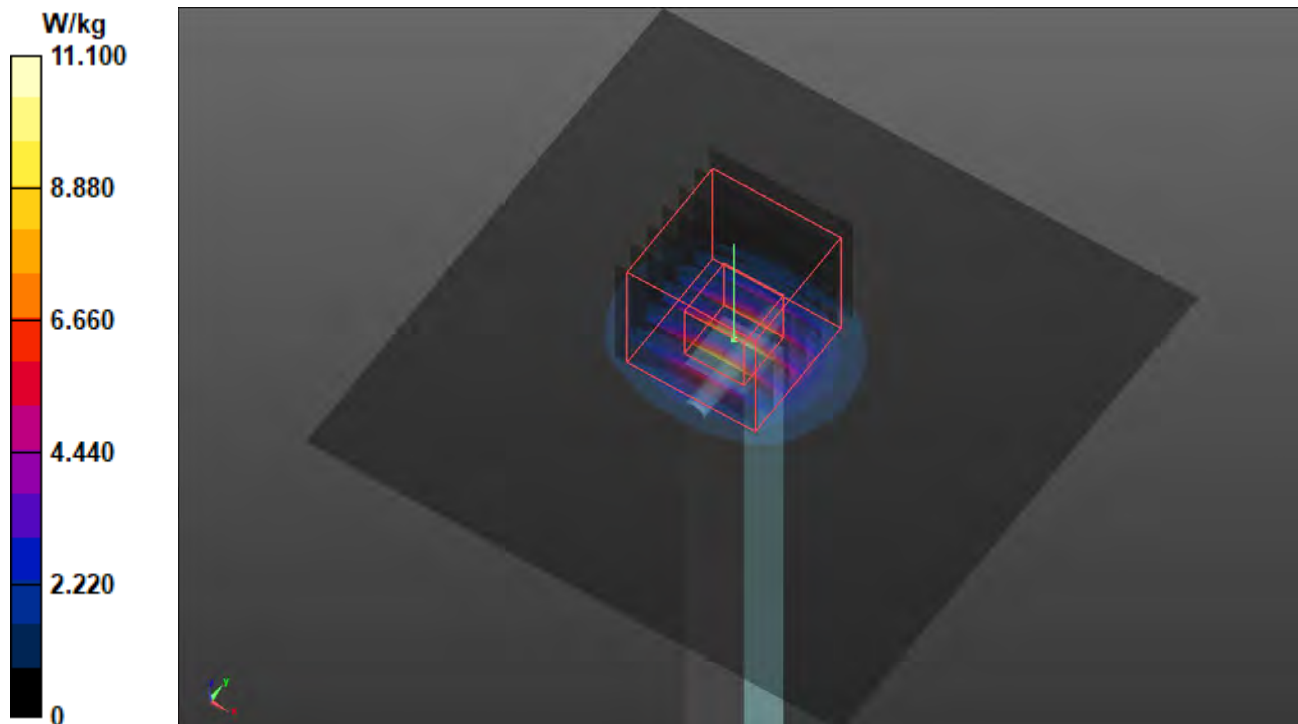
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 42.79 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 18.6 W/kg

SAR(1 g) = 4.4 W/kg; SAR(10 g) = 1.29 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: 2021/12/10

S04 System Check_H5750_211210

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

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

Medium: H34T60N1_1210 Medium parameters used: $f = 5750$ MHz; $\sigma = 5.265$ S/m; $\epsilon_r = 34.136$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C ; Liquid Temperature : 23.1°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(4.95, 4.95, 4.95) @ 5750 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

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

Maximum value of SAR (interpolated) = 10.2 W/kg

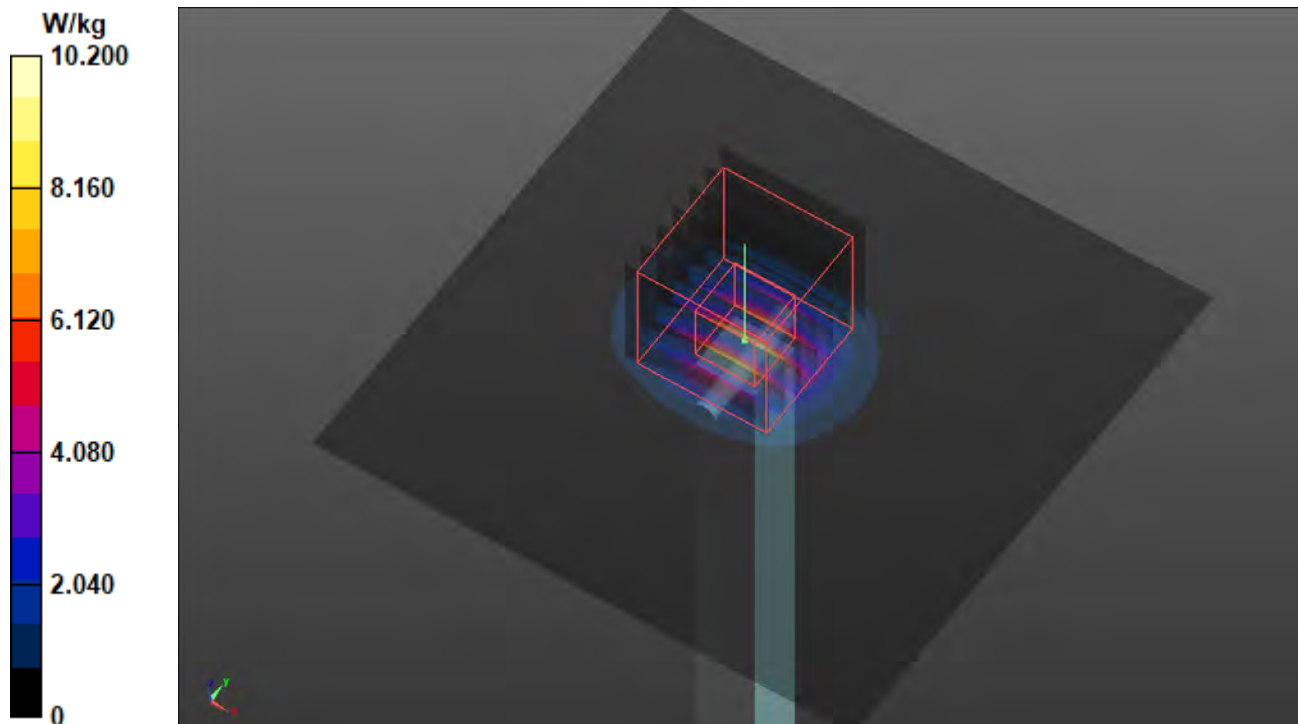
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 40.67 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 17.9 W/kg

SAR(1 g) = 3.99 W/kg; SAR(10 g) = 1.17 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: 2021/12/09

System Check_H2450_211209

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

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

Medium: H19T27N1_1209 Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 1.879$ S/m; $\epsilon_r = 39.279$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(7.61, 7.61, 7.61) @ 2450 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

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

Maximum value of SAR (interpolated) = 4.49 W/kg

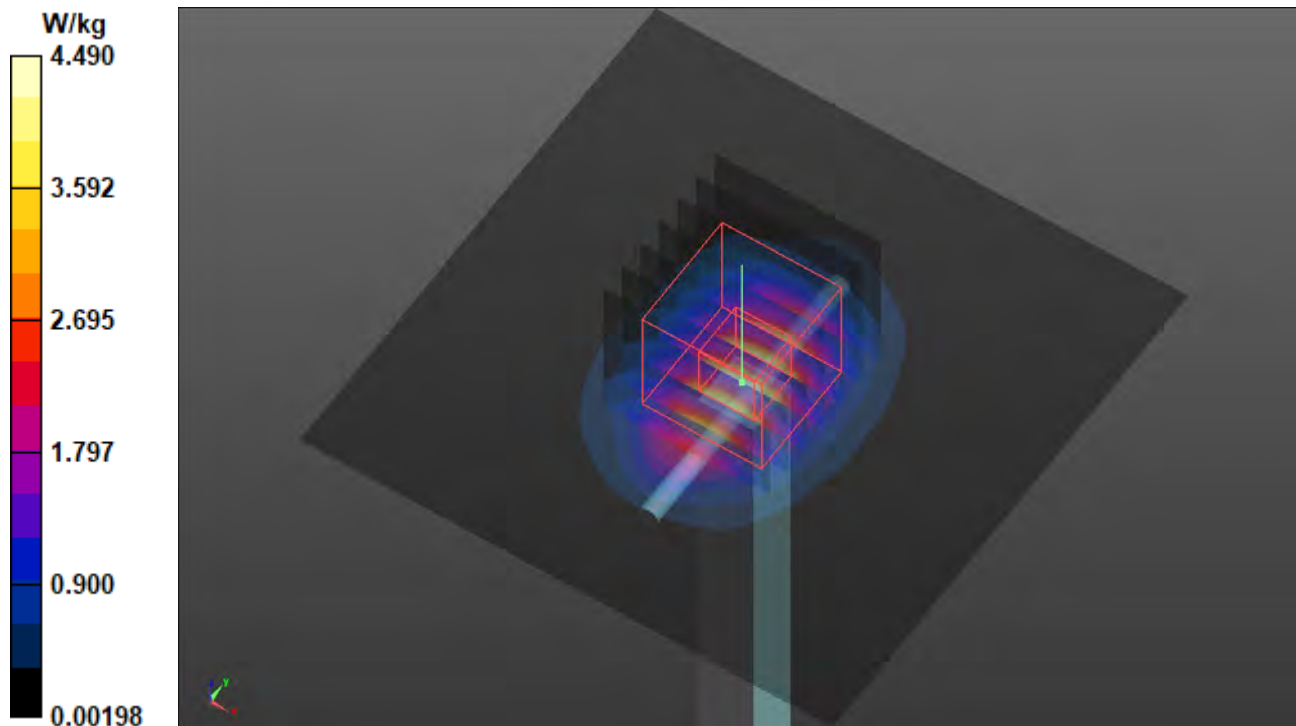
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 49.79 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 5.71 W/kg

SAR(1 g) = 2.61 W/kg; SAR(10 g) = 1.23 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.53 W/kg



Plots of System Verification

S06 SAR - System Check_H6500_211211

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	,		0--	6500.0, 0	5.5	6.12	33.8

Hardware Setup

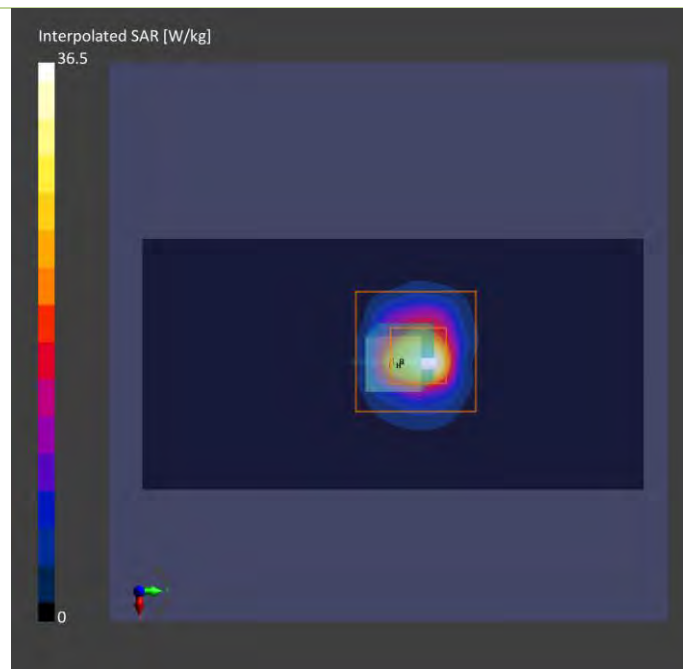
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2118	HBBL-600-10000 , 2021-Dec-11	EX3DV4 - SN7537, 2021-04-26	DAE4 Sn1585, 2021-04-15

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	2021-12-11	2021-12-11
psSAR1g [W/Kg]	22.9	26.6
psSAR10g [W/Kg]	4.75	5.00
Power Drift [dB]	0.02	-0.04



Plots of System Verification

S06 Power Density - System Check_10 GHz_211211

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5GAir	Front 10.00	Validation band	CW	10000.0	1.0

Hardware Setup

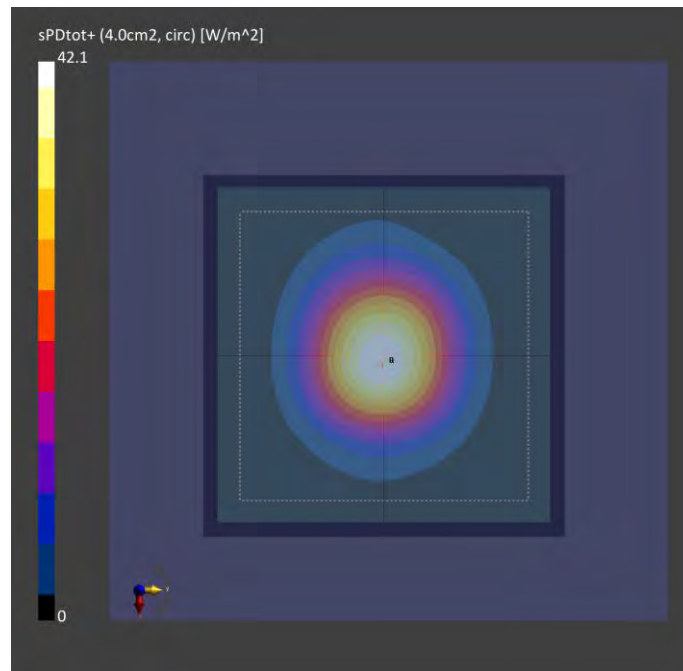
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air---	EUmmWV4 - SN9438_F1-55GHz, 2021-07-26	DAE4 Sn861, 2021-04-14

Scan Setup

	5G Scan
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.0

Measurement Results

	5G Scan
Date	2021-12-11
Avg. Area [cm ²]	4.00
pStotavg[W/m ²]	42.1
pSnavg [W/m ²]	41.8
E _{peak} [V/m]	136
Power Drift [dB]	0.01



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: 2021/12/09

P01 WLAN2.4G_802.11b_Bottom_0mm_Ch13_Ant 2_DSI=1

DUT: ACHI-WTW-P21123087

Communication System: UID 10012 - CAB, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps); Frequency: 2472 MHz; Duty Cycle: 1:1.01

Medium: H19T27N1_1209 Medium parameters used: $f = 2472$ MHz; $\sigma = 1.873$ S/m; $\epsilon_r = 38.125$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7554; ConvF(7.49, 7.49, 7.49) @ 2472 MHz; Calibrated: 2021/08/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2021/08/20
- Phantom: ELI Phantom_2105; Type: QD OVA 004 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (91x341x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.442 W/kg

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

Reference Value = 15.50 V/m; Power Drift = 0.14 dB

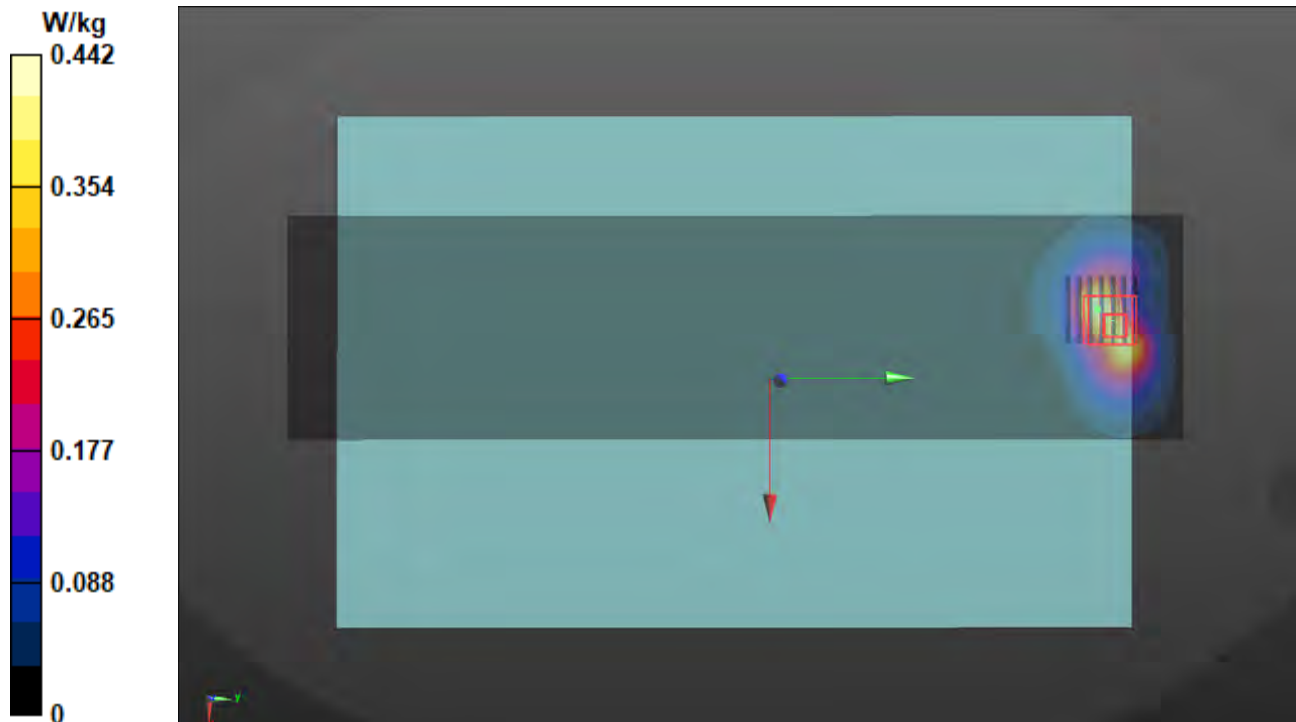
Peak SAR (extrapolated) = 3.79 W/kg

SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.331 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 5.5 mm

Ratio of SAR at M2 to SAR at M1 = 32.9%

Maximum value of SAR (measured) = 2.30 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2021/12/09

P02 WLAN5.3G_802.11ac_VHT160_Bottom_0mm_Ch50_Ant 2_DSI=1

DUT: ACHI-WTW-P21123087

Communication System: UID 10554 - AAD, IEEE 802.11ac WiFi (160MHz, MCS0); Frequency: 5250 MHz; Duty Cycle: 1:1.02

Medium: H34T60N1_1209 Medium parameters used (interpolated): $f = 5250$ MHz; $\sigma = 4.741$ S/m; $\epsilon_r = 36.971$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(5.5, 5.5, 5.5) @ 5250 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (101x401x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm
Maximum value of SAR (interpolated) = 1.40 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm
Reference Value = 14.34 V/m; Power Drift = -0.06 dB

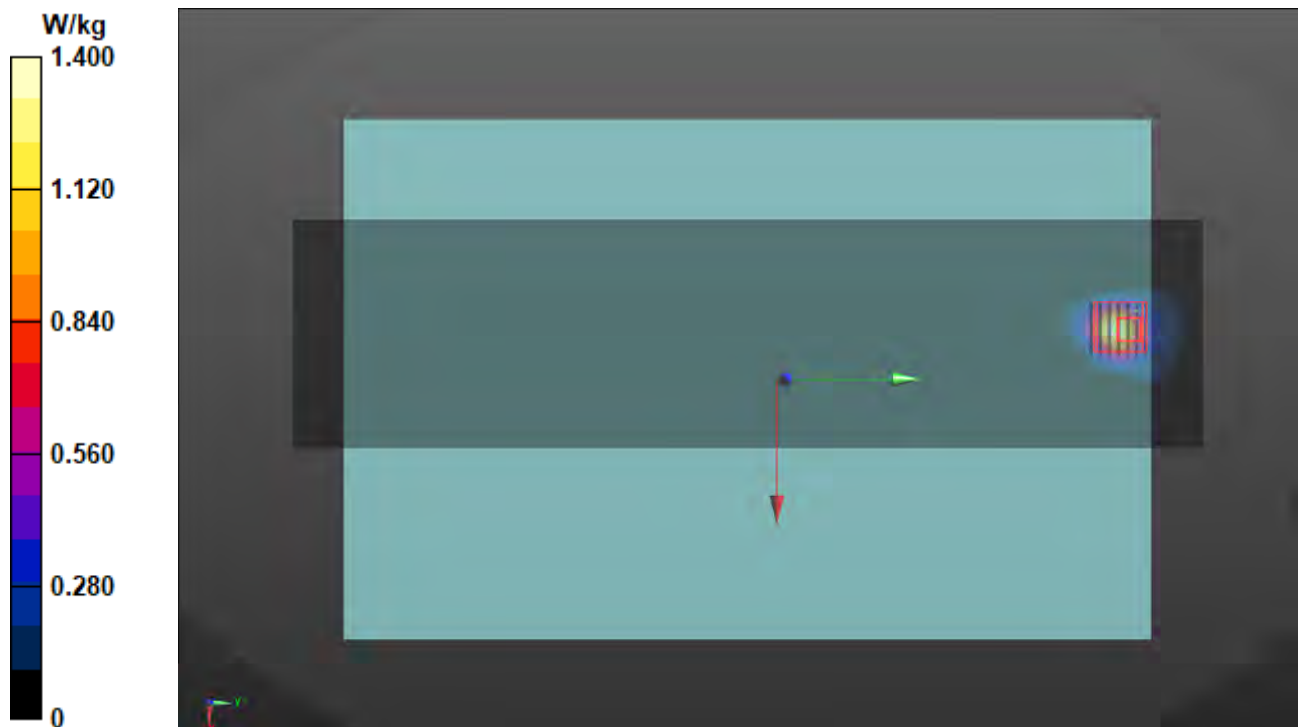
Peak SAR (extrapolated) = 4.59 W/kg

SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.312 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 4.3 mm

Ratio of SAR at M2 to SAR at M1 = 62.5%

Maximum value of SAR (measured) = 2.61 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2021/12/10

P03 WLAN5.6G_802.11ac VHT160_Bottom_0mm_Ch114_Ant 2_DSI=1

DUT: ACHI-WTW-P21123087

Communication System: UID 10554 - AAD, IEEE 802.11ac WiFi (160MHz, MCS0); Frequency: 5570 MHz; Duty Cycle: 1:1.02

Medium: H34T60N1_1210 Medium parameters used (interpolated): $f = 5570$ MHz; $\sigma = 5.091$ S/m; $\epsilon_r = 34.377$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C ; Liquid Temperature : 23.1°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(4.8, 4.8, 4.8) @ 5570 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (101x401x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.69 W/kg

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

Reference Value = 14.91 V/m; Power Drift = -0.11 dB

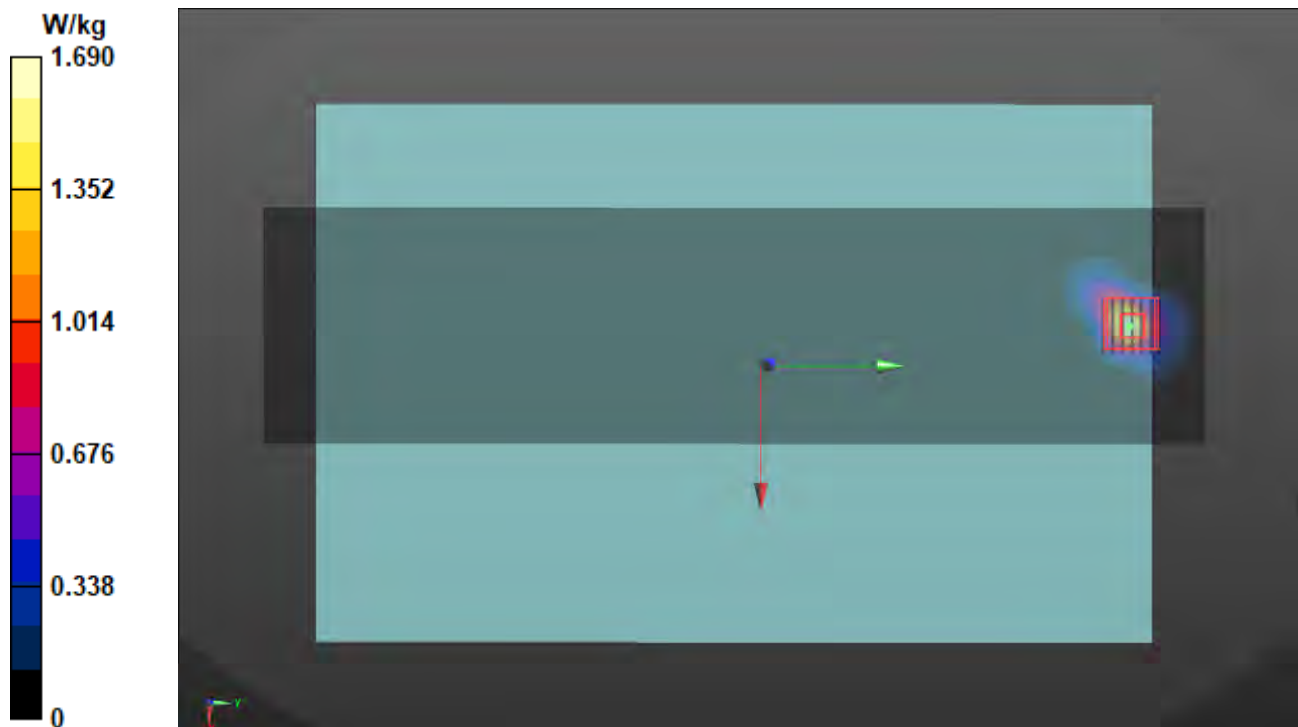
Peak SAR (extrapolated) = 5.25 W/kg

SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.320 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 4.7 mm

Ratio of SAR at M2 to SAR at M1 = 60.7%

Maximum value of SAR (measured) = 2.72 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2021/12/10

P04 WLAN5.8G_802.11ac VHT80_Bottom_0mm_Ch155_Ant 2_DSI=1

DUT: ACHI-WTW-P21123087

Communication System: UID 10544 - AAC, IEEE 802.11ac WiFi (80MHz, MCS0); Frequency: 5775 MHz; Duty Cycle: 1:1.04

Medium: H34T60N1_1210 Medium parameters used: $f = 5775$ MHz; $\sigma = 5.289$ S/m; $\epsilon_r = 34.092$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C ; Liquid Temperature : 23.1°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(4.95, 4.95, 4.95) @ 5775 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (101x401x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.68 W/kg

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

Reference Value = 13.67 V/m; Power Drift = -0.06 dB

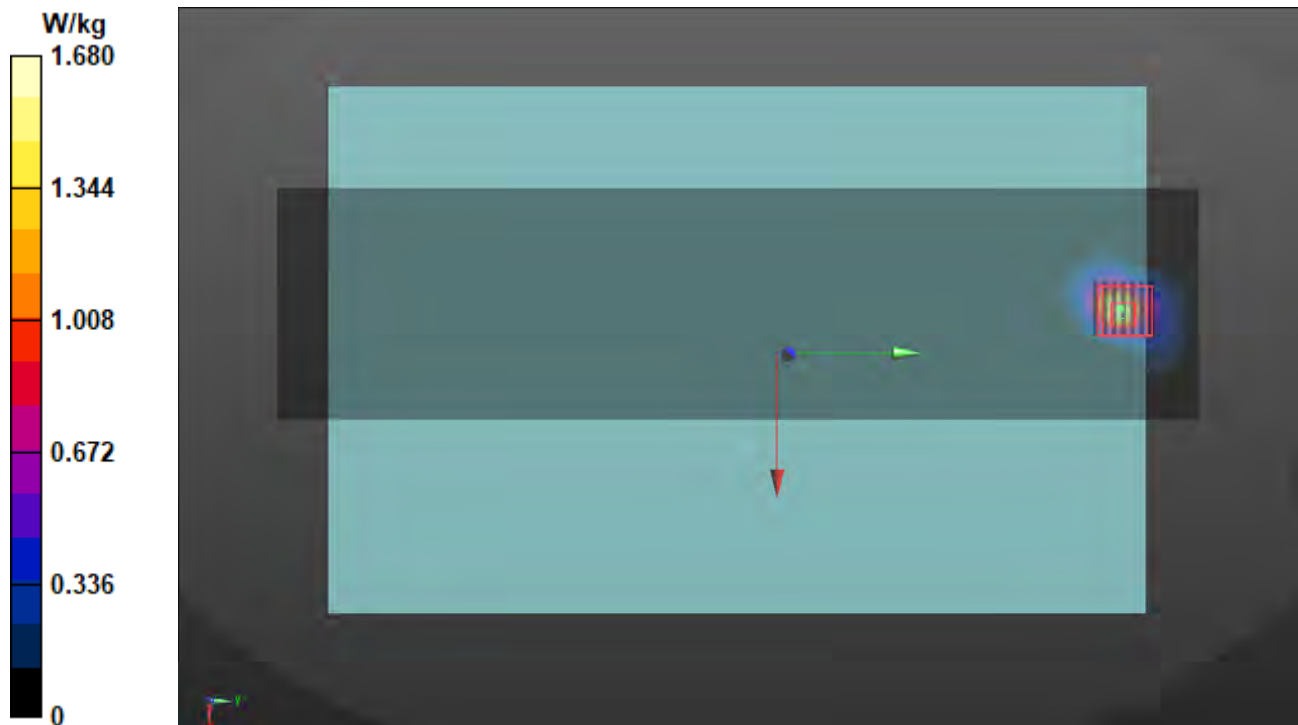
Peak SAR (extrapolated) = 3.04 W/kg

SAR(1 g) = 0.629 W/kg; SAR(10 g) = 0.223 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.2 mm

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

Maximum value of SAR (measured) = 1.66 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2021/12/09

P05 BT_BDT_Bottom_0mm_Ch39_Ant 1_DSI=0

DUT: ACHI-WTW-P21123087

Communication System: UID 10032 - CAA, IEEE 802.15.1 Bluetooth (GFSK, DH5); Frequency: 2441 MHz; Duty Cycle: 1:1

Medium: H19T27N1_1209 Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.869$ S/m; $\epsilon_r = 39.302$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(7.61, 7.61, 7.61) @ 2441 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: ELI Phantom_2118; Type: QD OVA 004 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (91x341x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm
Maximum value of SAR (interpolated) = 0.365 W/kg

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

Reference Value = 14.39 V/m; Power Drift = 0.09 dB

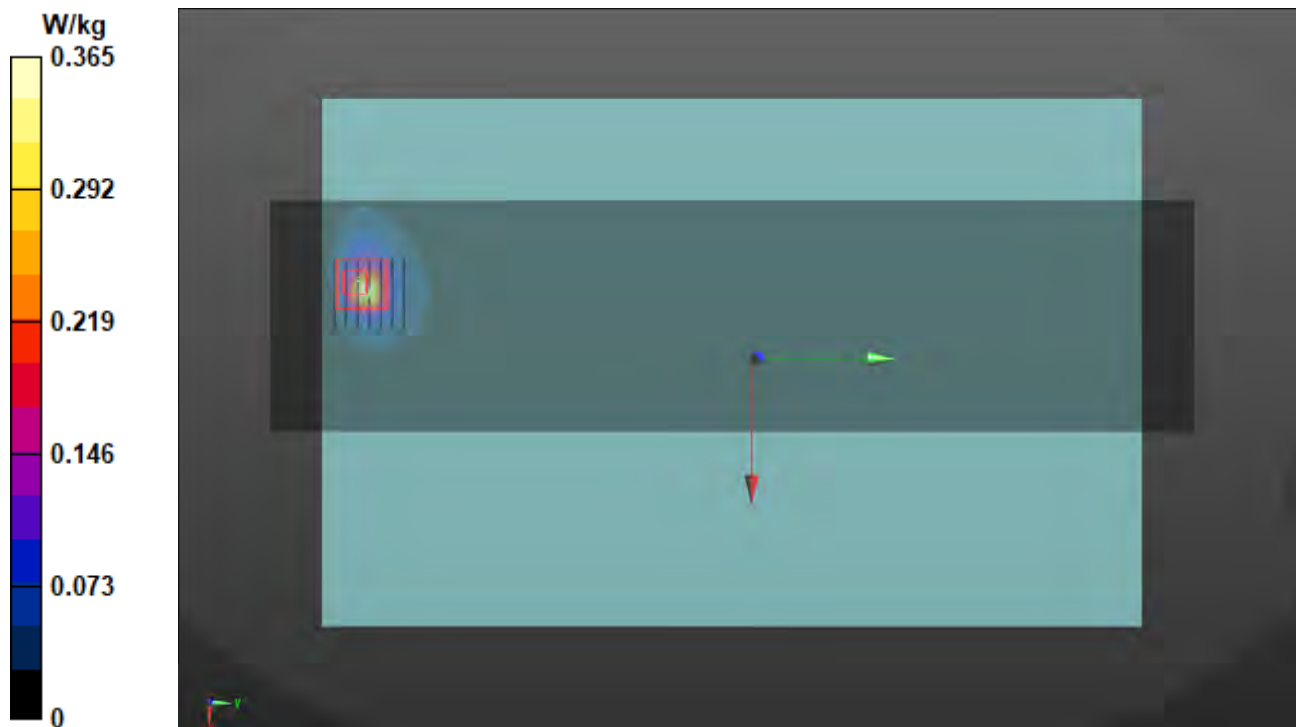
Peak SAR (extrapolated) = 0.772 W/kg

SAR(1 g) = 0.344 W/kg; SAR(10 g) = 0.153 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 5 mm

Ratio of SAR at M2 to SAR at M1 = 69%

Maximum value of SAR (measured) = 0.586 W/kg



Plots of Measurement

P06 SAR - UNII-7_802.11ax HE106_Bottom_Ch143_Ant 2_DSI=1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
ACHI-WTW-P21123087,	355.0 x 228.0 x 12.0		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	Bottom, 0.00	U-NII-7	WLAN, 10755-AAB	6665.0, 143	5.5	6.30	33.2

Hardware Setup

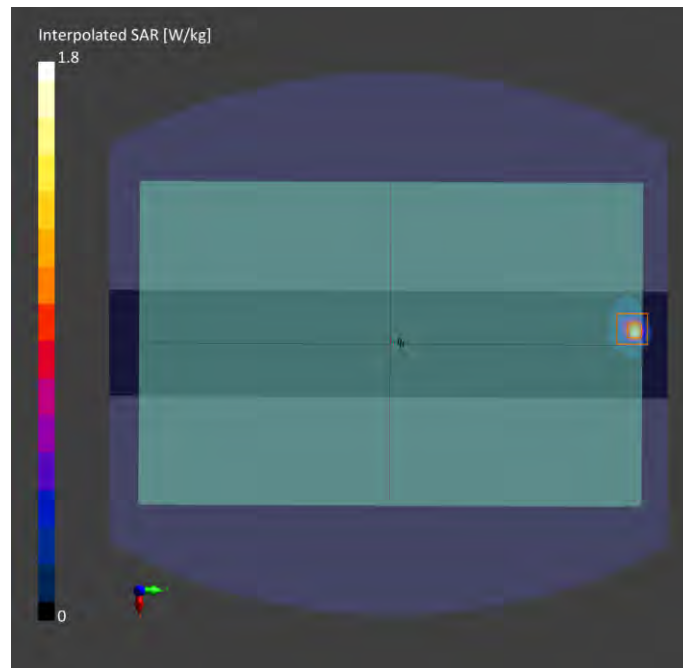
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2118	HBBL-600-10000 , 2021-Dec-11	EX3DV4 - SN7537, 2021-04-26	DAE4 Sn1585, 2021-04-15

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	75.0 x 405.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	7.5 x 7.5	3.4 x 3.4 x 1.2
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2021-12-11	2021-12-11
psSAR1g [W/Kg]	1.04	1.06
psSAR10g [W/Kg]	0.238	0.210
Power Drift [dB]	-0.05	0.08



Plots of Measurement

P06 Power Density - UNII-7_802.11ax HE160_Bottom_0mm_Ch143_Ant 2_DSI=1

Device under Test Properties

Name, Manufacturer	Dimensions [mm]	IMEI	DUT Type
ACHI-WTW-P21123087	356.0 x 230.0 x 10.0		Laptop

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5GAir	Bottom 2.00	U-NII-7	WLAN 10755	6665.0 143	1.0

Hardware Setup

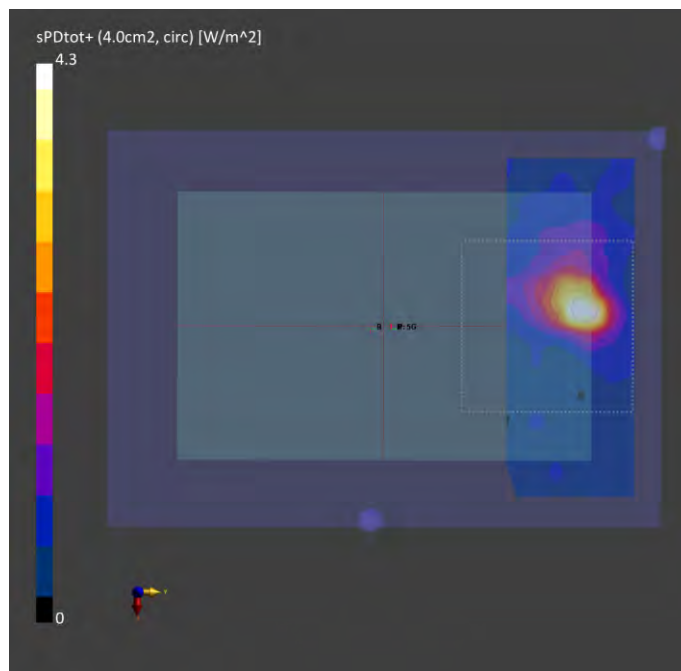
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air---	EUmmWV4 - SN9438_F1-55GHz, 2021-07-26	DAE4 Sn861, 2021-04-14

Scan Setup

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

Measurement Results

	5G Scan
Date	2021-12-11
Avg. Area [cm ²]	4.00
pStotavg[W/m ²]	4.30
pSnavg [W/m ²]	4.02
E _{peak} [V/m]	83.4
Power Drift [dB]	0.11



Annex 7 . Tissue & System Verification

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

Note:

1. For Section 4.3, the dielectric properties of the tissue simulating liquid have been measured within 24 hours before the SAR testing and within ± 10 % of the target values. Liquid temperature during the SAR testing has kept within ± 2 °C.
2. For Section 4.4, The SAR measurement system was validated according to procedures in 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	23.2	1.851	38.205	1.8	39.2	2.83	-2.54	Pass	Pass	Pass	OFDM	N/A	Pass	Dec. 09, 2021	2450	52.60	2.57	51.28	-2.51	737	7554	1589	17
S02	5250	23.3	4.741	36.971	4.71	35.9	0.66	2.98	Pass	Pass	Pass	OFDM	N/A	Pass	Dec. 09, 2021	5250	80.60	3.95	78.81	-2.22	1019	7537	1585	17
S03	5600	23.1	5.122	34.349	5.07	35.5	1.03	-3.24	Pass	Pass	Pass	OFDM	N/A	Pass	Dec. 10, 2021	5600	82.40	4.4	87.79	6.54	1019	7537	1585	17
S04	5750	23.1	5.265	34.136	5.22	35.4	0.86	-3.57	Pass	Pass	Pass	OFDM	N/A	Pass	Dec. 10, 2021	5750	79.40	3.99	79.61	0.27	1019	7537	1585	17
S05	2450	23.3	1.879	39.279	1.8	39.2	4.39	0.20	Pass	Pass	Pass	OFDM	N/A	Pass	Dec. 09, 2021	2450	52.60	2.61	52.08	-1.00	737	7537	1585	17
S06	6500	23.4	6.12	33.8	6.07	34.5	0.82	-2.03	Pass	Pass	Pass	OFDM	N/A	Pass	Dec. 11, 2021	6500	290.00	26.6	266.00	-8.28	1029	7537	1585	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	Dec. 11, 2021	10	9438	1025	4	10.0	42.7	42.1	-1.41%

Annex D. Maximum Target Conducted Power

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

Tune-up Power in dBm - Laptop Mode (Grip Sensor Off) for DSI = 0					
WLAN2.4GHz					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11b	1	2412	12.00	19.00	-
	6	2437	12.00	19.00	-
	11	2462	12.00	19.00	-
	12	2467	12.00	19.00	-
	13	2472	12.00	16.50	-
802.11g	1	2412	12.00	18.50	13.50
	6	2437	12.00	19.00	14.00
	11	2462	12.00	18.00	13.00
	12	2467	12.00	15.50	11.50
	13	2472	12.00	12.50	9.00
802.11n HT20	1	2412	12.00	18.50	13.50
	6	2437	12.00	19.00	14.00
	11	2462	12.00	18.00	13.00
	12	2467	12.00	15.50	11.50
	13	2472	12.00	12.50	9.00
802.11n HT40	3	2422	12.00	15.75	11.50
	6	2437	12.00	18.00	13.00
	9	2452	12.00	16.00	11.50
	10	2457	12.00	12.75	9.50
	11	2462	11.50	10.25	8.00
802.11ax HE20	1	2412	12.00	17.50	13.00
	6	2437	12.00	19.00	14.00
	11	2462	12.00	17.00	12.50
	12	2467	12.00	14.50	10.50
	13	2472	11.50	11.50	9.00
802.11ax HE40	3	2422	12.00	15.75	11.50
	6	2437	12.00	18.00	13.00
	9	2452	12.00	16.00	11.50
	10	2457	12.00	12.75	9.50
	11	2462	11.50	10.25	8.00

Tune-up Power in dBm - Laptop Mode (Grip Sensor Off) for DSI = 0			
Bluetooth			
Mode	Channel	Frequency	Ant 1 Max Tune-up
BR / EDR	0	2402	11.0
	39	2441	11.0
	78	2480	11.0
LE	0	2402	7.0
	19	2440	7.0
	39	2480	7.0

Tune-up Power in dBm - Laptop Mode (Grip Sensor Off) for DSI = 0					
WLAN 5.2GHz					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11a	36	5180	12.00	15.00	-
	40	5200	12.00	15.00	-
	44	5220	12.00	15.00	-
	48	5240	12.00	15.00	-
802.11n HT20	36	5180	12.00	15.00	11.00
	40	5200	12.00	15.00	11.00
	44	5220	12.00	15.00	11.00
	48	5240	12.00	15.00	11.00
802.11n HT40	38	5190	12.00	15.00	11.00
	46	5230	12.00	15.00	11.00
802.11ac VHT80	42	5210	12.00	15.00	11.00
802.11ax HE20	36	5180	12.00	15.00	11.00
	40	5200	12.00	15.00	11.00
	44	5220	12.00	15.00	11.00
	48	5240	12.00	15.00	11.00
802.11ax HE40	38	5190	12.00	15.00	11.00
	46	5230	12.00	15.00	11.00
802.11ax HE80	42	5210	12.00	15.00	11.00

Tune-up Power in dBm - Laptop Mode (Grip Sensor Off) for DSI = 0					
WLAN 5.3GHz					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11a	52	5260	12.00	15.00	-
	56	5280	12.00	15.00	-
	60	5300	12.00	15.00	-
	64	5320	12.00	15.00	-
802.11n HT20	52	5260	12.00	15.00	11.00
	56	5280	12.00	15.00	11.00
	60	5300	12.00	15.00	11.00
	64	5320	12.00	15.00	11.00
802.11n HT40	54	5270	12.00	15.00	11.00
	62	5310	12.00	15.00	11.00
802.11ac VHT80	58	5290	12.00	15.00	11.00
802.11ac VHT160	50	5250	12.00	14.00	10.50
802.11ax HE20	52	5260	12.00	15.00	11.00
	56	5280	12.00	15.00	11.00
	60	5300	12.00	15.00	11.00
	64	5320	12.00	15.00	11.00
802.11ax HE40	54	5270	12.00	15.00	11.00
	62	5310	12.00	15.00	11.00
802.11ax HE80	58	5290	12.00	15.00	11.00
802.11ax HE160	50	5250	12.00	14.00	10.50

Tune-up Power in dBm - Laptop Mode (Grip Sensor Off) for DSI = 0					
WLAN 5.6GHz					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11a	100	5500	11.00	15.00	-
	116	5580	11.00	15.00	-
	120	5600	11.00	15.00	-
	124	5620	11.00	15.00	-
	132	5660	11.00	15.00	-
	140	5700	11.00	15.00	-
	144	5720	11.00	15.00	-
802.11n HT20	100	5500	11.00	15.00	10.50
	116	5580	11.00	15.00	10.50
	120	5600	11.00	15.00	10.50
	124	5620	11.00	15.00	10.50
	132	5660	11.00	15.00	10.50
	140	5700	11.00	15.00	10.50
	144	5720	11.00	15.00	10.50
802.11n HT40	102	5510	11.00	15.00	10.50
	110	5550	11.00	15.00	10.50
	118	5590	11.00	15.00	10.50
	126	5630	11.00	15.00	10.50
	134	5670	11.00	15.00	10.50
	142	5710	11.00	15.00	10.50
802.11ac VHT80	106	5530	11.00	15.00	10.50
	122	5610	11.00	15.00	10.50
	138	5690	11.00	15.00	10.50
802.11ac VHT160	114	5570	11.00	15.00	10.50
802.11ax HE20	100	5500	11.00	15.00	10.50
	116	5580	11.00	15.00	10.50
	120	5600	11.00	15.00	10.50
	124	5620	11.00	15.00	10.50
	132	5660	11.00	15.00	10.50
	140	5700	11.00	15.00	10.50
	144	5720	11.00	15.00	10.50
802.11ax HE40	102	5510	11.00	15.00	10.50
	110	5550	11.00	15.00	10.50
	118	5590	11.00	15.00	10.50
	126	5630	11.00	15.00	10.50
	134	5670	11.00	15.00	10.50
	142	5710	11.00	15.00	10.50
802.11ax HE80	106	5530	11.00	15.00	10.50
	122	5610	11.00	15.00	10.50
	138	5690	11.00	15.00	10.50
802.11ax HE160	114	5570	11.00	15.00	10.50

Tune-up Power in dBm - Laptop Mode (Grip Sensor Off) for DSI = 0					
WLAN 5.8GHz					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11a	149	5745	11.00	15.00	-
	153	5765	11.00	15.00	-
	157	5785	11.00	15.00	-
	161	5805	11.00	15.00	-
	165	5825	11.00	15.00	-
802.11n HT20	149	5745	11.00	15.00	10.50
	153	5765	11.00	15.00	10.50
	157	5785	11.00	15.00	10.50
	161	5805	11.00	15.00	10.50
	165	5825	11.00	15.00	10.50
802.11n HT40	151	5755	11.00	15.00	10.50
	159	5795	11.00	15.00	10.50
802.11ac VHT80	155	5775	11.00	15.00	10.50
802.11ax HE20	149	5745	11.00	15.00	10.50
	153	5765	11.00	15.00	10.50
	157	5785	11.00	15.00	10.50
	161	5805	11.00	15.00	10.50
	165	5825	11.00	15.00	10.50
802.11ax HE40	151	5755	11.00	15.00	10.50
	159	5795	11.00	15.00	10.50
802.11ax HE80	155	5775	11.00	15.00	10.50

Tune-up Power in dBm - Laptop Mode (Grip Sensor Off) for DSI = 0					
UNII-5					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11ax HE20	1	5945	5.50	5.50	2.50
	5	5965	5.50	5.50	2.50
	9	5985	5.50	5.50	2.50
	13	6005	5.50	5.50	2.50
	17	6025	5.50	5.50	2.50
	21	6045	5.50	5.50	2.50
	25	6065	5.50	5.50	2.50
	29	6085	5.50	5.50	2.50
	33	6105	5.50	5.50	2.50
	37	6125	5.50	5.50	2.50
	41	6145	5.50	5.50	2.50
	45	6165	5.50	5.50	2.50
	49	6185	5.50	5.50	2.50
	53	6205	5.50	5.50	2.50
	57	6225	5.50	5.50	2.50
	61	6245	5.50	5.50	2.50
	65	6265	5.50	5.50	2.50
	69	6285	5.50	5.50	2.50
	73	6305	5.50	5.50	2.50
	77	6325	5.50	5.50	2.50
81	6345	5.50	5.50	2.50	
85	6365	5.50	5.50	2.50	
89	6385	5.50	5.50	2.50	
93	6405	5.50	5.50	2.50	
802.11ax HE40	3	5955	8.75	8.75	5.75
	11	5995	8.75	8.75	5.75
	19	6035	8.75	8.75	5.75
	27	6075	8.75	8.75	5.75
	35	6115	8.75	8.75	5.75
	43	6155	8.75	8.75	5.75
	51	6195	8.75	8.75	5.75
	59	6235	8.75	8.75	5.75
	67	6275	8.75	8.75	5.75
	75	6315	8.75	8.75	5.75
	83	6355	8.75	8.75	5.75
91	6395	8.75	8.75	5.75	
802.11ax HE80	7	5975	11.25	11.25	8.25
	23	6055	11.25	11.25	8.25
	39	6135	11.25	11.25	8.25
	55	6215	11.25	11.25	8.25
	71	6295	11.25	11.25	8.25
	87	6375	11.25	11.25	8.25
802.11ax HE160	15	6015	11.50	13.50	10.00
	47	6175	11.50	13.50	10.00
	79	6335	11.50	13.50	10.00

Tune-up Power in dBm - Laptop Mode (Grip Sensor Off) for DSI = 0					
UNII-6					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11ax HE20	97	6425	4.50	4.50	2.00
	101	6445	4.50	4.50	2.00
	105	6465	4.50	4.50	2.00
	109	6485	4.75	4.75	1.75
	113	6505	4.75	4.75	1.75
	117	6525	4.75	4.75	1.75
802.11ax HE40	99	6435	8.50	8.50	5.75
	107	6475	8.50	8.50	5.75
	115	6515	8.50	8.50	5.75
802.11ax HE80	103	6455	11.25	11.25	8.25
	119	6535	11.25	11.25	8.25
802.11ax HE160	111	6495	11.50	13.50	10.00

Tune-up Power in dBm - Laptop Mode (Grip Sensor Off) for DSI = 0					
UNII-7					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11ax HE20	121	6545	4.75	4.75	1.75
	125	6565	4.75	4.75	1.75
	129	6585	4.75	4.75	1.75
	133	6605	4.75	4.75	1.75
	137	6625	4.75	4.75	1.75
	141	6645	4.75	4.75	1.75
	145	6665	4.75	4.75	1.75
	149	6685	4.75	4.75	1.75
	153	6705	4.75	4.75	1.75
	157	6725	4.75	4.75	1.75
	161	6745	4.75	4.75	1.75
	165	6765	4.75	4.75	1.75
	169	6785	4.75	4.75	1.75
	173	6805	4.75	4.75	1.75
	177	6825	4.75	4.75	1.75
802.11ax HE40	181	6845	4.75	4.75	1.75
	185	6865	4.75	4.75	1.75
	123	6555	8.00	8.00	5.00
	131	6595	8.00	8.00	5.00
	139	6635	8.00	8.00	5.00
	147	6675	8.00	8.00	5.00
	155	6715	8.00	8.00	5.00
	163	6755	8.00	8.00	5.00
	171	6795	8.00	8.00	5.00
802.11ax HE80	179	6835	8.00	8.00	5.00
	187	6875	8.00	8.00	5.00
	135	6615	10.50	10.50	7.50
	151	6695	10.50	10.50	7.50
802.11ax HE160	167	6775	10.50	10.50	7.50
	183	6855	10.50	10.50	7.50
	143	6655	11.50	13.25	9.50
	175	6815	11.50	13.25	9.50

Tune-up Power in dBm - Laptop Mode (Grip Sensor Off) for DSI = 0					
UNII-8					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11ax HE20	189	6885	3.75	3.75	0.00
	193	6905	3.75	3.75	0.00
	197	6925	3.75	3.75	0.00
	201	6945	3.75	3.75	0.00
	205	6965	3.75	3.75	0.00
	209	6985	3.75	3.75	0.00
	213	7005	3.75	3.75	0.00
	217	7025	3.75	3.75	0.00
	221	7045	3.75	3.75	0.00
	225	7065	3.75	3.75	0.00
	229	7085	3.75	3.75	0.00
	233	7105	0.50	0.50	-4.00
802.11ax HE40	195	6915	8.00	8.00	5.00
	203	6955	8.00	8.00	5.00
	211	6995	8.00	8.00	5.00
	219	7035	8.00	8.00	5.00
	227	7075	8.00	8.00	5.00
802.11ax HE80	199	6935	10.50	10.50	7.50
	215	7015	10.50	10.50	7.50
802.11ax HE160	207	6975	11.50	13.25	9.50

Tune-up Power in dBm - Laptop Mode (Grip Sensor On) for DSI = 1				
WLAN2.4GHz				
Mode	Channel	Frequency	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11b	1	2412	12.50	-
	6	2437	12.50	-
	11	2462	12.50	-
	12	2467	12.50	-
	13	2472	12.50	-
802.11g	1	2412	12.50	11.00
	6	2437	12.50	11.00
	11	2462	12.50	11.00
	12	2467	12.50	11.00
	13	2472	12.50	9.00
802.11n HT20	1	2412	12.50	11.00
	6	2437	12.50	11.00
	11	2462	12.50	11.00
	12	2467	12.50	11.00
	13	2472	12.50	9.00
802.11n HT40	3	2422	12.50	11.00
	6	2437	12.50	11.00
	9	2452	12.50	11.00
	10	2457	12.50	9.50
	11	2462	10.25	8.00
802.11ax HE20	1	2412	12.50	11.00
	6	2437	12.50	11.00
	11	2462	12.50	11.00
	12	2467	12.50	11.00
	13	2472	12.50	9.00
802.11ax HE40	3	2422	12.50	11.00
	6	2437	12.50	11.00
	9	2452	12.50	11.00
	10	2457	12.50	9.50
	11	2462	10.25	8.00

Tune-up Power in dBm - Laptop Mode (Grip Sensor On) for DSI = 1				
WLAN 5.2GHz				
Mode	Channel	Frequency	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11a	36	5180	12.00	-
	40	5200	12.00	-
	44	5220	12.00	-
	48	5240	12.00	-
802.11n HT20	36	5180	12.00	9.50
	40	5200	12.00	9.50
	44	5220	12.00	9.50
	48	5240	12.00	9.50
802.11n HT40	38	5190	12.00	9.50
	46	5230	12.00	9.50
802.11ac VHT80	42	5210	12.00	9.50
802.11ax HE20	36	5180	12.00	9.50
	40	5200	12.00	9.50
	44	5220	12.00	9.50
	48	5240	12.00	9.50
802.11ax HE40	38	5190	12.00	9.50
	46	5230	12.00	9.50
802.11ax HE80	42	5210	12.00	9.50

Tune-up Power in dBm - Laptop Mode (Grip Sensor On) for DSI = 1				
WLAN 5.3GHz				
Mode	Channel	Frequency	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11a	52	5260	12.00	-
	56	5280	12.00	-
	60	5300	12.00	-
	64	5320	12.00	-
802.11n HT20	52	5260	12.00	9.50
	56	5280	12.00	9.50
	60	5300	12.00	9.50
	64	5320	12.00	9.50
802.11n HT40	54	5270	12.00	9.50
	62	5310	12.00	9.50
802.11ac VHT80	58	5290	12.00	9.50
802.11ac VHT160	50	5250	12.00	9.50
802.11ax HE20	52	5260	12.00	9.50
	56	5280	12.00	9.50
	60	5300	12.00	9.50
	64	5320	12.00	9.50
802.11ax HE40	54	5270	12.00	9.50
	62	5310	12.00	9.50
802.11ax HE80	58	5290	12.00	9.50
802.11ax HE160	50	5250	12.00	9.50

Tune-up Power in dBm - Laptop Mode (Grip Sensor On) for DSI = 1				
WLAN 5.6GHz				
Mode	Channel	Frequency	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11a	100	5500	12.00	-
	116	5580	12.00	-
	120	5600	12.00	-
	124	5620	12.00	-
	132	5660	12.00	-
	140	5700	12.00	-
	144	5720	12.00	-
802.11n HT20	100	5500	12.00	9.00
	116	5580	12.00	9.00
	120	5600	12.00	9.00
	124	5620	12.00	9.00
	132	5660	12.00	9.00
	140	5700	12.00	9.00
	144	5720	12.00	9.00
802.11n HT40	102	5510	12.00	9.00
	110	5550	12.00	9.00
	118	5590	12.00	9.00
	126	5630	12.00	9.00
	134	5670	12.00	9.00
	142	5710	12.00	9.00
802.11ac VHT80	106	5530	12.00	9.00
	122	5610	12.00	9.00
	138	5690	12.00	9.00
802.11ac VHT160	114	5570	12.00	9.00
802.11ax HE20	100	5500	12.00	9.00
	116	5580	12.00	9.00
	120	5600	12.00	9.00
	124	5620	12.00	9.00
	132	5660	12.00	9.00
	140	5700	12.00	9.00
	144	5720	12.00	9.00
802.11ax HE40	102	5510	12.00	9.00
	110	5550	12.00	9.00
	118	5590	12.00	9.00
	126	5630	12.00	9.00
	134	5670	12.00	9.00
	142	5710	12.00	9.00
802.11ax HE80	106	5530	12.00	9.00
	122	5610	12.00	9.00
	138	5690	12.00	9.00
802.11ax HE160	114	5570	12.00	9.00

Tune-up Power in dBm - Laptop Mode (Grip Sensor On) for DSI = 1				
WLAN 5.8GHz				
Mode	Channel	Frequency	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11a	149	5745	12.00	-
	153	5765	12.00	-
	157	5785	12.00	-
	161	5805	12.00	-
	165	5825	12.00	-
802.11n HT20	149	5745	12.00	9.00
	153	5765	12.00	9.00
	157	5785	12.00	9.00
	161	5805	12.00	9.00
	165	5825	12.00	9.00
802.11n HT40	151	5755	12.00	9.00
	159	5795	12.00	9.00
802.11ac VHT80	155	5775	12.00	9.00
802.11ax HE20	149	5745	12.00	9.00
	153	5765	12.00	9.00
	157	5785	12.00	9.00
	161	5805	12.00	9.00
	165	5825	12.00	9.00
802.11ax HE40	151	5755	12.00	9.00
	159	5795	12.00	9.00
802.11ax HE80	155	5775	12.00	9.00

Tune-up Power in dBm - Laptop Mode (Grip Sensor On) for DSI = 1				
UNII-5				
Mode	Channel	Frequency	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11ax HE20	1	5945	5.50	2.50
	5	5965	5.50	2.50
	9	5985	5.50	2.50
	13	6005	5.50	2.50
	17	6025	5.50	2.50
	21	6045	5.50	2.50
	25	6065	5.50	2.50
	29	6085	5.50	2.50
	33	6105	5.50	2.50
	37	6125	5.50	2.50
	41	6145	5.50	2.50
	45	6165	5.50	2.50
	49	6185	5.50	2.50
	53	6205	5.50	2.50
	57	6225	5.50	2.50
	61	6245	5.50	2.50
	65	6265	5.50	2.50
	69	6285	5.50	2.50
	73	6305	5.50	2.50
	77	6325	5.50	2.50
81	6345	5.50	2.50	
85	6365	5.50	2.50	
89	6385	5.50	2.50	
93	6405	5.50	2.50	
802.11ax HE40	3	5955	8.75	5.75
	11	5995	8.75	5.75
	19	6035	8.75	5.75
	27	6075	8.75	5.75
	35	6115	8.75	5.75
	43	6155	8.75	5.75
	51	6195	8.75	5.75
	59	6235	8.75	5.75
	67	6275	8.75	5.75
	75	6315	8.75	5.75
	83	6355	8.75	5.75
91	6395	8.75	5.75	
802.11ax HE80	7	5975	10.25	8.25
	23	6055	10.25	8.25
	39	6135	10.25	8.25
	55	6215	10.25	8.25
	71	6295	10.25	8.25
	87	6375	10.25	8.25
802.11ax HE160	15	6015	10.25	10.00
	47	6175	10.25	10.00
	79	6335	10.25	10.00

Tune-up Power in dBm - Laptop Mode (Grip Sensor On) for DSI = 1				
UNII-6				
Mode	Channel	Frequency	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11ax HE20	97	6425	4.50	2.00
	101	6445	4.50	2.00
	105	6465	4.50	2.00
	109	6485	4.75	1.75
	113	6505	4.75	1.75
	117	6525	4.75	1.75
802.11ax HE40	99	6435	8.50	5.75
	107	6475	8.50	5.75
	115	6515	8.50	5.75
802.11ax HE80	103	6455	10.25	8.25
	119	6535	10.25	8.25
802.11ax HE160	111	6495	10.25	10.00

Tune-up Power in dBm - Laptop Mode (Grip Sensor On) for DSI = 1				
UNII-7				
Mode	Channel	Frequency	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11ax HE20	121	6545	4.75	1.75
	125	6565	4.75	1.75
	129	6585	4.75	1.75
	133	6605	4.75	1.75
	137	6625	4.75	1.75
	141	6645	4.75	1.75
	145	6665	4.75	1.75
	149	6685	4.75	1.75
	153	6705	4.75	1.75
	157	6725	4.75	1.75
	161	6745	4.75	1.75
	165	6765	4.75	1.75
	169	6785	4.75	1.75
	173	6805	4.75	1.75
	177	6825	4.75	1.75
	181	6845	4.75	1.75
185	6865	4.75	1.75	
802.11ax HE40	123	6555	8.00	5.00
	131	6595	8.00	5.00
	139	6635	8.00	5.00
	147	6675	8.00	5.00
	155	6715	8.00	5.00
	163	6755	8.00	5.00
	171	6795	8.00	5.00
	179	6835	8.00	5.00
187	6875	8.00	5.00	
802.11ax HE80	135	6615	10.25	7.50
	151	6695	10.25	7.50
	167	6775	10.25	7.50
	183	6855	10.25	7.50
802.11ax HE160	143	6655	10.25	9.50
	175	6815	10.25	9.50

Tune-up Power in dBm - Laptop Mode (Grip Sensor On) for DSI = 1				
UNII-8				
Mode	Channel	Frequency	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11ax HE20	189	6885	3.75	0.00
	193	6905	3.75	0.00
	197	6925	3.75	0.00
	201	6945	3.75	0.00
	205	6965	3.75	0.00
	209	6985	3.75	0.00
	213	7005	3.75	0.00
	217	7025	3.75	0.00
	221	7045	3.75	0.00
	225	7065	3.75	0.00
	229	7085	3.75	0.00
	233	7105	0.50	-4.00
802.11ax HE40	195	6915	8.00	5.00
	203	6955	8.00	5.00
	211	6995	8.00	5.00
	219	7035	8.00	5.00
	227	7075	8.00	5.00
802.11ax HE80	199	6935	10.25	7.50
	215	7015	10.25	7.50
802.11ax HE160	207	6975	10.25	9.50

Tune-up Power in dBm - Tablet Mode for DSI = 2					
WLAN 2.4GHz					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11b	1	2412	19.00	15.00	-
	6	2437	19.00	15.00	-
	11	2462	19.00	15.00	-
	12	2467	19.00	15.00	-
	13	2472	17.50	15.00	-
802.11g	1	2412	18.00	15.00	14.00
	6	2437	19.00	15.00	14.50
	11	2462	17.75	15.00	14.00
	12	2467	15.50	15.00	12.00
	13	2472	12.50	12.50	9.00
802.11n HT20	1	2412	18.00	15.00	14.00
	6	2437	19.00	15.00	14.50
	11	2462	17.75	15.00	14.00
	12	2467	15.50	15.00	12.00
	13	2472	12.50	12.50	9.00
802.11n HT40	3	2422	16.50	15.00	13.00
	6	2437	17.25	15.00	13.50
	9	2452	17.50	15.00	13.50
	10	2457	13.00	12.75	10.00
	11	2462	11.50	10.25	8.00
802.11ax HE20	1	2412	17.00	15.00	13.50
	6	2437	19.00	15.00	14.50
	11	2462	16.75	15.00	13.00
	12	2467	14.50	14.50	12.00
	13	2472	11.50	11.50	9.00
802.11ax HE40	3	2422	16.50	15.00	13.00
	6	2437	17.25	15.00	13.50
	9	2452	17.50	15.00	13.50
	10	2457	13.00	12.75	10.00
	11	2462	11.50	10.25	8.00

Tune-up Power in dBm - Tablet Mode for DSI = 2			
Bluetooth			
Mode	Channel	Frequency	Ant 1 Max Tune-up
BR / EDR	0	2402	11.0
	39	2441	11.0
	78	2480	11.0
LE	0	2402	7.0
	19	2440	7.0
	39	2480	7.0

Tune-up Power in dBm - Tablet Mode for DSI = 2					
WLAN 5.2GHz					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11a	36	5180	15.00	14.00	-
	40	5200	15.00	14.00	-
	44	5220	15.00	14.00	-
	48	5240	15.00	14.00	-
802.11n HT20	36	5180	15.00	14.00	12.00
	40	5200	15.00	14.00	12.00
	44	5220	15.00	14.00	12.00
	48	5240	15.00	14.00	12.00
802.11n HT40	38	5190	15.00	14.00	12.00
	46	5230	15.00	14.00	12.00
802.11ac VHT80	42	5210	15.00	14.00	12.00
802.11ax HE20	36	5180	15.00	14.00	12.00
	40	5200	15.00	14.00	12.00
	44	5220	15.00	14.00	12.00
	48	5240	15.00	14.00	12.00
802.11ax HE40	38	5190	15.00	14.00	12.00
	46	5230	15.00	14.00	12.00
802.11ax HE80	42	5210	15.00	14.00	12.00

Tune-up Power in dBm - Tablet Mode for DSI = 2					
WLAN 5.3GHz					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11a	52	5260	15.00	14.00	-
	56	5280	15.00	14.00	-
	60	5300	15.00	14.00	-
	64	5320	15.00	14.00	-
802.11n HT20	52	5260	15.00	14.00	12.00
	56	5280	15.00	14.00	12.00
	60	5300	15.00	14.00	12.00
	64	5320	15.00	14.00	12.00
802.11n HT40	54	5270	15.00	14.00	12.00
	62	5310	15.00	14.00	12.00
802.11ac VHT80	58	5290	15.00	14.00	12.00
802.11ac VHT160	50	5250	14.00	14.00	11.50
802.11ax HE20	52	5260	15.00	14.00	12.00
	56	5280	15.00	14.00	12.00
	60	5300	15.00	14.00	12.00
	64	5320	15.00	14.00	12.00
802.11ax HE40	54	5270	15.00	14.00	12.00
	62	5310	15.00	14.00	12.00
802.11ax HE80	58	5290	15.00	14.00	12.00
802.11ax HE160	50	5250	14.00	14.00	11.50

Tune-up Power in dBm - Tablet Mode for DSI = 2					
WLAN 5.6GHz					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11a	100	5500	15.00	14.00	-
	116	5580	15.00	14.00	-
	120	5600	15.00	14.00	-
	124	5620	15.00	14.00	-
	132	5660	15.00	14.00	-
	140	5700	15.00	14.00	-
	144	5720	15.00	14.00	-
802.11n HT20	100	5500	15.00	14.00	12.00
	116	5580	15.00	14.00	12.00
	120	5600	15.00	14.00	12.00
	124	5620	15.00	14.00	12.00
	132	5660	15.00	14.00	12.00
	140	5700	15.00	14.00	12.00
	144	5720	15.00	14.00	12.00
802.11n HT40	102	5510	15.00	14.00	12.00
	110	5550	15.00	14.00	12.00
	118	5590	15.00	14.00	12.00
	126	5630	15.00	14.00	12.00
	134	5670	15.00	14.00	12.00
	142	5710	15.00	14.00	12.00
802.11ac VHT80	106	5530	15.00	14.00	12.00
	122	5610	15.00	14.00	12.00
	138	5690	15.00	14.00	12.00
802.11ac VHT160	114	5570	15.00	14.00	12.00
802.11ax HE20	100	5500	15.00	14.00	12.00
	116	5580	15.00	14.00	12.00
	120	5600	15.00	14.00	12.00
	124	5620	15.00	14.00	12.00
	132	5660	15.00	14.00	12.00
	140	5700	15.00	14.00	12.00
	144	5720	15.00	14.00	12.00
802.11ax HE40	102	5510	15.00	14.00	12.00
	110	5550	15.00	14.00	12.00
	118	5590	15.00	14.00	12.00
	126	5630	15.00	14.00	12.00
	134	5670	15.00	14.00	12.00
	142	5710	15.00	14.00	12.00
802.11ax HE80	106	5530	15.00	14.00	12.00
	122	5610	15.00	14.00	12.00
	138	5690	15.00	14.00	12.00
802.11ax HE160	114	5570	15.00	14.00	12.00

Tune-up Power in dBm - Tablet Mode for DSI = 2					
WLAN 5.8GHz					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11a	149	5745	15.00	14.00	-
	153	5765	15.00	14.00	-
	157	5785	15.00	14.00	-
	161	5805	15.00	14.00	-
	165	5825	15.00	14.00	-
802.11n HT20	149	5745	15.00	14.00	12.00
	153	5765	15.00	14.00	12.00
	157	5785	15.00	14.00	12.00
	161	5805	15.00	14.00	12.00
	165	5825	15.00	14.00	12.00
802.11n HT40	151	5755	15.00	14.00	12.00
	159	5795	15.00	14.00	12.00
802.11ac VHT80	155	5775	15.00	14.00	12.00
802.11ax HE20	149	5745	15.00	14.00	12.00
	153	5765	15.00	14.00	12.00
	157	5785	15.00	14.00	12.00
	161	5805	15.00	14.00	12.00
	165	5825	15.00	14.00	12.00
802.11ax HE40	151	5755	15.00	14.00	12.00
	159	5795	15.00	14.00	12.00
802.11ax HE80	155	5775	15.00	14.00	12.00

Tune-up Power in dBm - Tablet Mode for DSI = 2					
UNII-5					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11ax HE20	1	5955	5.50	5.50	2.50
	5	5975	5.50	5.50	2.50
	9	5995	5.50	5.50	2.50
	13	6015	5.50	5.50	2.50
	17	6035	5.50	5.50	2.50
	21	6055	5.50	5.50	2.50
	25	6075	5.50	5.50	2.50
	29	6095	5.50	5.50	2.50
	33	6115	5.50	5.50	2.50
	37	6135	5.50	5.50	2.50
	41	6155	5.50	5.50	2.50
	45	6175	5.50	5.50	2.50
	49	6195	5.50	5.50	2.50
	53	6215	5.50	5.50	2.50
	57	6235	5.50	5.50	2.50
	61	6255	5.50	5.50	2.50
	65	6275	5.50	5.50	2.50
	69	6295	5.50	5.50	2.50
	73	6315	5.50	5.50	2.50
	77	6335	5.50	5.50	2.50
81	6355	5.50	5.50	2.50	
85	6375	5.50	5.50	2.50	
89	6395	5.50	5.50	2.50	
93	6415	5.50	5.50	2.50	
802.11ax HE40	3	5965	8.75	8.75	5.75
	11	6005	8.75	8.75	5.75
	19	6045	8.75	8.75	5.75
	27	6085	8.75	8.75	5.75
	35	6125	8.75	8.75	5.75
	43	6165	8.75	8.75	5.75
	51	6205	8.75	8.75	5.75
	59	6245	8.75	8.75	5.75
	67	6285	8.75	8.75	5.75
	75	6325	8.75	8.75	5.75
	83	6365	8.75	8.75	5.75
91	6405	8.75	8.75	5.75	
802.11ax HE80	7	5985	11.25	11.25	8.25
	23	6065	11.25	11.25	8.25
	39	6145	11.25	11.25	8.25
	55	6225	11.25	11.25	8.25
	71	6305	11.25	11.25	8.25
	87	6385	11.25	11.25	8.25
802.11ax HE160	15	6025	13.50	13.50	11.00
	47	6185	13.50	13.50	11.00
	79	6345	13.50	13.50	11.00

Tune-up Power in dBm - Tablet Mode for DSI = 2					
UNII-6					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11ax HE20	97	6435	4.50	4.50	2.00
	101	6455	4.50	4.50	2.00
	105	6475	4.50	4.50	2.00
	109	6495	4.75	4.75	1.75
	113	6515	4.75	4.75	1.75
	117	6535	4.75	4.75	1.75
802.11ax HE40	99	6445	8.50	8.50	5.75
	107	6485	8.50	8.50	5.75
	115	6525	8.50	8.50	5.75
802.11ax HE80	103	6465	11.25	10.50	8.00
	119	6545	11.25	10.50	8.00
802.11ax HE160	111	6505	13.50	10.50	9.50

Tune-up Power in dBm - Tablet Mode for DSI = 2					
UNII-7					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11ax HE20	121	6555	4.75	4.75	1.75
	125	6575	4.75	4.75	1.75
	129	6595	4.75	4.75	1.75
	133	6615	4.75	4.75	1.75
	137	6635	4.75	4.75	1.75
	141	6655	4.75	4.75	1.75
	145	6675	4.75	4.75	1.75
	149	6695	4.75	4.75	1.75
	153	6715	4.75	4.75	1.75
	157	6735	4.75	4.75	1.75
	161	6755	4.75	4.75	1.75
	165	6775	4.75	4.75	1.75
	169	6795	4.75	4.75	1.75
	173	6815	4.75	4.75	1.75
	177	6835	4.75	4.75	1.75
802.11ax HE40	181	6855	4.75	4.75	1.75
	185	6875	4.75	4.75	1.75
	123	6565	8.00	8.00	5.00
	131	6605	8.00	8.00	5.00
	139	6645	8.00	8.00	5.00
	147	6685	8.00	8.00	5.00
	155	6725	8.00	8.00	5.00
	163	6765	8.00	8.00	5.00
	171	6805	8.00	8.00	5.00
802.11ax HE80	179	6845	8.00	8.00	5.00
	187	6885	8.00	8.00	5.00
	135	6625	10.50	10.50	7.50
	151	6705	10.50	10.50	7.50
802.11ax HE160	167	6785	10.50	9.50	7.50
	183	6865	10.50	9.50	7.50
802.11ax HE160	143	6665	13.25	10.50	9.50
	175	6825	13.25	9.50	9.00

Tune-up Power in dBm - Tablet Mode for DSI = 2					
UNII-8					
Mode	Channel	Frequency	SISO Ant 1 Max Tune up	SISO Ant 2 Max Tune up	MIMO Ant 1+2 Max Tune up
802.11ax HE20	189	6895	3.75	3.75	0.00
	193	6915	3.75	3.75	0.00
	197	6935	3.75	3.75	0.00
	201	6955	3.75	3.75	0.00
	205	6975	3.75	3.75	0.00
	209	6995	3.75	3.75	0.00
	213	7015	3.75	3.75	0.00
	217	7035	3.75	3.75	0.00
	221	7055	3.75	3.75	0.00
	225	7075	3.75	3.75	0.00
	229	7095	3.75	3.75	0.00
	233	7115	0.50	0.50	-4.00
802.11ax HE40	195	6925	8.00	8.00	5.00
	203	6965	8.00	8.00	5.00
	211	7005	8.00	8.00	5.00
	219	7045	8.00	8.00	5.00
	227	7085	8.00	8.00	5.00
802.11ax HE80	199	6945	10.50	9.50	7.50
	215	7025	10.50	9.50	7.50
802.11ax HE160	207	6985	13.25	9.50	9.00

Annex E. Measured Conducted Power Result

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

Conducted Power - Laptop Mode (Grip Sensor Off) for DSI = 0			
WLAN2.4GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11b	1	2412	11.91
	6	2437	11.82
	11	2462	11.99
	12	2467	11.94
	13	2472	11.93

Bluetooth Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
BR / EDR	0	2402	10.41
	39	2441	10.72
	78	2480	10.81
LE	0	2402	5.68
	19	2440	5.91
	39	2480	6.34

WLAN 5.3GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ac VHT160	50	5250	11.97

WLAN 5.6GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ac VHT160	114	5570	10.97

WLAN 5.8GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ac VHT80	155	5775	10.98

UNII-5 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	15	6025	11.49
	47	6185	11.41
	79	6345	11.39

UNII-6 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	111	6505	11.43

UNII-7 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	143	6665	11.38
	175	6825	11.34

UNII-8 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	207	6985	11.41

Conducted Power - Laptop Mode (Grip Sensor Off) for DSI = 0			
WLAN2.4GHz Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11b	1	2412	18.95
	6	2437	18.86
	11	2462	18.96
	12	2467	18.89
	13	2472	16.39

WLAN 5.3GHz Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ac VHT80	58	5290	14.88

WLAN 5.6GHz Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ac VHT160	114	5570	14.99

WLAN 5.8GHz Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ac VHT80	155	5775	14.99

UNII-5 Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ax HE160	15	6025	13.48
	47	6185	13.45
	79	6345	13.46

UNII-6 Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ax HE160	111	6505	13.47

UNII-7 Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ax HE160	143	6665	13.23
	175	6825	13.17

UNII-8 Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ax HE160	207	6985	13.13

Conducted Power - Laptop Mode (Grip Sensor Off) for DSI = 0

WLAN2.4GHz Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11g	1	2412	10.21	10.45	13.34
	6	2437	10.97	10.94	13.97
	11	2462	9.78	9.81	12.81
	12	2467	8.49	8.44	11.48
	13	2472	5.92	5.98	8.96

WLAN 5.3GHz Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ac VHT80	58	5290	7.85	7.91	10.89

WLAN 5.6GHz Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ac VHT160	114	5570	7.48	7.46	10.48

WLAN 5.8GHz Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ac VHT80	155	5775	7.46	7.49	10.49

UNII-5 Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ax HE160	15	6025	6.97	6.99	9.99
	47	6185	6.89	6.87	9.89
	79	6345	6.86	6.82	9.85

UNII-6 Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ax HE160	111	6505	6.83	6.88	9.87

UNII-7 Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ax HE160	143	6665	6.47	6.49	9.49
	175	6825	6.39	6.45	9.43

UNII-8 Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ax HE160	207	6985	6.49	6.37	9.44

Conducted Power - Laptop Mode (Grip Sensor On) for DSI = 1			
WLAN2.4GHz Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11b	1	2412	12.36
	6	2437	12.39
	11	2462	12.48
	12	2467	12.41
	13	2472	12.37

WLAN 5.3GHz Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ac VHT160	50	5250	11.97

WLAN 5.6GHz Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ac VHT160	114	5570	11.92

WLAN 5.8GHz Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ac VHT80	155	5775	11.86

UNII-5 Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ax HE160	15	6025	10.22
	47	6185	10.18
	79	6345	10.15

UNII-6 Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ax HE160	111	6505	10.24

UNII-7 Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ax HE160	143	6665	10.24
	175	6825	10.18

UNII-8 Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ax HE160	207	6985	10.19

Conducted Power - Laptop Mode (Grip Sensor On) for DSI = 1**WLAN2.4GHz Ant 1+2**

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11n HT40	3	2422	7.84	7.89	10.88
	6	2437	7.79	7.91	10.86
	9	2452	7.97	7.99	10.99
	10	2457	6.48	6.45	9.48
	11	2462	4.92	4.91	7.93

WLAN 5.3GHz Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ac VHT160	50	5250	6.49	6.46	9.49

WLAN 5.6GHz Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ac VHT160	114	5570	5.98	5.94	8.97

WLAN 5.8GHz Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ac VHT80	155	5775	5.86	5.84	8.86

UNII-5 Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ax HE160	15	6025	6.91	6.88	9.91
	47	6185	6.89	6.94	9.93
	79	6345	6.81	6.87	9.85

UNII-6 Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ax HE160	111	6505	6.89	6.84	9.88

UNII-7 Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ax HE160	143	6665	6.41	6.21	9.32
	175	6825	6.42	6.37	9.41

UNII-8 Ant 1+2

Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ax HE160	207	6985	6.39	6.28	9.35

Conducted Power - Tablet Mode for DSI = 2			
WLAN2.4GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11b	1	2412	18.81
	6	2437	18.86
	11	2462	18.99
	12	2467	18.93
	13	2472	17.43

Bluetooth Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
BR / EDR	0	2402	10.41
	39	2441	10.72
	78	2480	10.81
LE	0	2402	5.68
	19	2440	5.91
	39	2480	6.34

WLAN 5.3GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ac VHT80	58	5290	14.85

WLAN 5.6GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ac VHT160	114	5570	14.97

WLAN 5.8GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ac VHT80	155	5775	14.93

UNII-5 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	15	6025	13.48
	47	6185	13.42
	79	6345	13.43

UNII-6 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	111	6505	13.31

UNII-7 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	143	6665	13.24
	175	6825	13.22

UNII-8 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	207	6985	13.19

Conducted Power - Tablet Mode for DSI = 2			
WLAN2.4GHz Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11b	1	2412	14.93
	6	2437	14.91
	11	2462	14.99
	12	2467	14.85
	13	2472	14.87

WLAN 5.3GHz Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ac VHT160	50	5250	13.98

WLAN 5.6GHz Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ac VHT160	114	5570	13.97

WLAN 5.8GHz Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ac VHT80	155	5775	13.93

UNII-5 Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ax HE160	15	6025	13.49
	47	6185	13.39
	79	6345	13.43

UNII-6 Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ax HE160	111	6505	10.49

UNII-7 Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ax HE160	143	6665	10.39
	175	6825	9.46

UNII-8 Ant 2			
Mode	Channel	Frequency	SISO Ant 2 Avg. Power
802.11ax HE160	207	6985	9.41

Conducted Power - Tablet Mode for DSI = 2

WLAN2.4GHz Ant 1+2					
Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11g	1	2412	10.87	10.98	13.94
	6	2437	11.43	11.42	14.44
	11	2462	10.87	10.98	13.94
	12	2467	8.95	8.88	11.93
	13	2472	5.91	5.86	8.9

WLAN 5.3GHz Ant 1+2					
Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ac VHT80	58	5290	8.95	8.97	11.97

WLAN 5.6GHz Ant 1+2					
Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ac VHT160	114	5570	8.98	8.94	11.97

WLAN 5.8GHz Ant 1+2					
Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ac VHT80	155	5775	8.78	8.96	11.88

UNII-5 Ant 1+2					
Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ax HE160	15	6025	7.98	7.98	10.99
	47	6185	7.94	7.94	10.95
	79	6345	7.96	7.88	10.93

UNII-6 Ant 1+2					
Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ax HE160	111	6505	6.46	6.42	9.45

UNII-7 Ant 1+2					
Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ax HE160	143	6665	6.38	6.48	9.44
	175	6825	5.83	5.93	8.89

UNII-8 Ant 1+2					
Mode	Channel	Frequency	MIMO Ant 1 Avg. Power	MIMO Ant 2 Avg. Power	MIMO Ant 1+2 Avg. Power
802.11ax HE160	207	6985	5.97	5.89	8.94

Annex F. SAR 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.
3. Per Apr. 2021 TCB Workshop U-NII 6-7G interim procedures, minimum of 5 channels of Power Density on U-NII 6-7G Bands were performed.
4. Per Apr. 2021 TCB Workshop U-NII 6-7G interim procedures, the power density measured results were scaled by factor 1.545 to reported power density when measurement uncertainty exceed 30%.

Body SAR Test Result

System & Position						DUT & Accessory		SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	Ant Status	Power Level	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	11	Ant 1	DSI = 0	99.00	1.01	12.00	11.99	1.00	0.17	0.785	0.79
	WLAN2.4G	802.11b	Bottom	6	11	Ant 2	DSI = 0	99.30	1.01	19.00	18.96	1.01	0.07	1.07	1.09
	WLAN2.4G	802.11g	Bottom	6	6	Ant 1+2	DSI = 0	96.30	1.04	14.00	13.97	1.01	0.05	0.192	0.20
	WLAN2.4G	802.11b	Bottom	0	11	Ant 2	DSI = 1	99.30	1.01	12.50	12.48	1.00	-0.01	0.955	0.96
	WLAN2.4G	802.11n HT40	Bottom	0	9	Ant 1+2	DSI = 1	99.00	1.01	11.00	10.99	1.00	0	0.388	0.39
	WLAN2.4G	802.11b	Rear Face	0	11	Ant 1	DSI = 2	99.00	1.01	19.00	18.99	1.00	-0.15	0.066	0.07
	WLAN2.4G	802.11b	Left Side	0	11	Ant 1	DSI = 2	99.00	1.01	19.00	18.99	1.00	-0.16	0.346	0.35
	WLAN2.4G	802.11b	Right Side	0	11	Ant 1	DSI = 2	99.00	1.01	19.00	18.99	1.00	0	<0.001	0.00
	WLAN2.4G	802.11b	Top Side	0	11	Ant 1	DSI = 2	99.00	1.01	19.00	18.99	1.00	0	<0.001	0.00
	WLAN2.4G	802.11b	Bottom Side	0	11	Ant 1	DSI = 2	99.00	1.01	19.00	18.99	1.00	0	<0.001	0.00
	WLAN2.4G	802.11b	Rear Face	0	11	Ant 2	DSI = 2	99.30	1.01	15.00	14.99	1.00	0	<0.001	0.00
	WLAN2.4G	802.11b	Left Side	0	11	Ant 2	DSI = 2	99.30	1.01	15.00	14.99	1.00	0	<0.001	0.00
	WLAN2.4G	802.11b	Right Side	0	11	Ant 2	DSI = 2	99.30	1.01	15.00	14.99	1.00	0.06	0.292	0.29
	WLAN2.4G	802.11b	Top Side	0	11	Ant 2	DSI = 2	99.30	1.01	15.00	14.99	1.00	0	<0.001	0.00
	WLAN2.4G	802.11b	Bottom Side	0	11	Ant 2	DSI = 2	99.30	1.01	15.00	14.99	1.00	0	<0.001	0.00
	WLAN2.4G	802.11g	Rear Face	0	6	Ant 1+2	DSI = 2	96.30	1.04	14.50	14.44	1.01	0	<0.001	0.00
	WLAN2.4G	802.11g	Left Side	0	6	Ant 1+2	DSI = 2	96.30	1.04	14.50	14.44	1.01	-0.18	0.061	0.06
	WLAN2.4G	802.11g	Right Side	0	6	Ant 1+2	DSI = 2	96.30	1.04	14.50	14.44	1.01	0.05	0.158	0.17
	WLAN2.4G	802.11g	Top Side	0	6	Ant 1+2	DSI = 2	96.30	1.04	14.50	14.44	1.01	0	<0.001	0.00
	WLAN2.4G	802.11g	Bottom Side	0	6	Ant 1+2	DSI = 2	96.30	1.04	14.50	14.44	1.01	0	<0.001	0.00
	WLAN2.4G	802.11b	Bottom	6	1	Ant 2	DSI = 0	99.30	1.01	19.00	18.95	1.01	0.01	0.85	0.87
	WLAN2.4G	802.11b	Bottom	6	6	Ant 2	DSI = 0	99.30	1.01	19.00	18.86	1.03	0.15	0.932	0.97
	WLAN2.4G	802.11b	Bottom	6	12	Ant 2	DSI = 0	99.30	1.01	19.00	18.89	1.03	-0.06	1.02	1.06
	WLAN2.4G	802.11b	Bottom	6	13	Ant 2	DSI = 0	99.30	1.01	16.50	16.39	1.03	-0.12	1.05	1.09
	WLAN2.4G	802.11b	Bottom	0	1	Ant 2	DSI = 1	99.30	1.01	12.50	12.36	1.03	0.08	0.757	0.79
	WLAN2.4G	802.11b	Bottom	0	6	Ant 2	DSI = 1	99.30	1.01	12.50	12.39	1.03	-0.17	0.827	0.86
	WLAN2.4G	802.11b	Bottom	0	12	Ant 2	DSI = 1	99.30	1.01	12.50	12.41	1.02	-0.19	0.99	1.02
1	WLAN2.4G	802.11b	Bottom	0	13	Ant 2	DSI = 1	99.30	1.01	12.50	12.37	1.03	0.14	1.06	1.10
	WLAN2.4G	802.11b	Bottom	0	13	Ant 2	DSI = 1	99.30	1.01	12.50	12.37	1.03	0.12	1.04	1.08

Body SAR Test Result

System & Position						DUT & Accessory		SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	Ant Status	Power Level	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)
	WLAN5.3G	802.11ac VHT160	Bottom	0	50	Ant 1	DSI = 0	98.20	1.02	12.00	11.97	1.01	-0.05	0.801	0.83
	WLAN5.3G	802.11ac VHT80	Bottom	6	58	Ant 2	DSI = 0	96.50	1.04	15.00	14.88	1.03	-0.09	0.379	0.41
	WLAN5.3G	802.11ac VHT80	Bottom	6	58	Ant 1+2	DSI = 0	98.50	1.02	11.00	10.89	1.03	0.06	0.091	0.10
2	WLAN5.3G	802.11ac VHT160	Bottom	0	50	Ant 2	DSI = 1	97.60	1.02	12.00	11.97	1.01	-0.06	1.02	1.05
	WLAN5.3G	802.11ac VHT160	Bottom	0	50	Ant 1+2	DSI = 1	98.20	1.02	9.50	9.49	1.00	0.12	0.341	0.35
	WLAN5.3G	802.11ac VHT80	Rear Face	0	58	Ant 1	DSI = 2	98.30	1.02	15.00	14.85	1.04	-0.16	0.201	0.21
	WLAN5.3G	802.11ac VHT80	Left Side	0	58	Ant 1	DSI = 2	98.30	1.02	15.00	14.85	1.04	-0.07	0.658	0.70
	WLAN5.3G	802.11ac VHT80	Right Side	0	58	Ant 1	DSI = 2	98.30	1.02	15.00	14.85	1.04	0	<0.001	0.00
	WLAN5.3G	802.11ac VHT80	Top Side	0	58	Ant 1	DSI = 2	98.30	1.02	15.00	14.85	1.04	0	<0.001	0.00
	WLAN5.3G	802.11ac VHT80	Bottom Side	0	58	Ant 1	DSI = 2	98.30	1.02	15.00	14.85	1.04	0	<0.001	0.00
	WLAN5.3G	802.11ac VHT160	Rear Face	0	50	Ant 2	DSI = 2	96.50	1.04	14.00	13.98	1.00	0.03	0.068	0.07
	WLAN5.3G	802.11ac VHT160	Left Side	0	50	Ant 2	DSI = 2	96.50	1.04	14.00	13.98	1.00	0	<0.001	0.00
	WLAN5.3G	802.11ac VHT160	Right Side	0	50	Ant 2	DSI = 2	96.50	1.04	14.00	13.98	1.00	-0.02	0.256	0.27
	WLAN5.3G	802.11ac VHT160	Top Side	0	50	Ant 2	DSI = 2	96.50	1.04	14.00	13.98	1.00	0	<0.001	0.00
	WLAN5.3G	802.11ac VHT160	Bottom Side	0	50	Ant 2	DSI = 2	96.50	1.04	14.00	13.98	1.00	0	<0.001	0.00
	WLAN5.3G	802.11ac VHT80	Rear Face	0	58	Ant 1+2	DSI = 2	98.50	1.02	12.00	11.97	1.01	0.04	0.136	0.14
	WLAN5.3G	802.11ac VHT80	Left Side	0	58	Ant 1+2	DSI = 2	98.50	1.02	12.00	11.97	1.01	0.03	0.211	0.22
	WLAN5.3G	802.11ac VHT80	Right Side	0	58	Ant 1+2	DSI = 2	98.50	1.02	12.00	11.97	1.01	0.02	0.127	0.13
	WLAN5.3G	802.11ac VHT80	Top Side	0	58	Ant 1+2	DSI = 2	98.50	1.02	12.00	11.97	1.01	0	<0.001	0.00
	WLAN5.3G	802.11ac VHT80	Bottom Side	0	58	Ant 1+2	DSI = 2	98.50	1.02	12.00	11.97	1.01	0	<0.001	0.00
	WLAN5.3G	802.11ac VHT160	Bottom	0	50	Ant 2	DSI = 1	97.60	1.02	12.00	11.97	1.01	0.02	0.998	1.03

Body SAR Test Result

System & Position						DUT & Accessory		SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	Ant Status	Power Level	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)
	WLAN5.6G	802.11ac VHT160	Bottom	0	114	Ant 1	DSI = 0	98.20	1.02	11.00	10.97	1.01	0.08	0.972	1.00
	WLAN5.6G	802.11ac VHT160	Bottom	6	114	Ant 2	DSI = 0	97.60	1.02	15.00	14.99	1.00	0.06	0.449	0.46
	WLAN5.6G	802.11ac VHT160	Bottom	6	114	Ant 1+2	DSI = 0	98.20	1.02	10.50	10.48	1.00	0.02	0.095	0.10
3	WLAN5.6G	802.11ac VHT160	Bottom	0	114	Ant 2	DSI = 1	97.60	1.02	12.00	11.92	1.02	-0.11	1.05	1.09
	WLAN5.6G	802.11ac VHT160	Bottom	0	114	Ant 1+2	DSI = 1	98.20	1.02	9.00	8.97	1.01	0.03	0.28	0.29
	WLAN5.6G	802.11ac VHT160	Rear Face	0	114	Ant 1	DSI = 2	98.20	1.02	15.00	14.97	1.01	0.05	0.055	0.06
	WLAN5.6G	802.11ac VHT160	Left Side	0	114	Ant 1	DSI = 2	98.20	1.02	15.00	14.97	1.01	-0.06	0.542	0.56
	WLAN5.6G	802.11ac VHT160	Right Side	0	114	Ant 1	DSI = 2	98.20	1.02	15.00	14.97	1.01	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	Ant 1	DSI = 2	98.20	1.02	15.00	14.97	1.01	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Bottom Side	0	114	Ant 1	DSI = 2	98.20	1.02	15.00	14.97	1.01	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Rear Face	0	114	Ant 2	DSI = 2	97.60	1.02	14.00	13.97	1.01	0.02	0.106	0.11
	WLAN5.6G	802.11ac VHT160	Left Side	0	114	Ant 2	DSI = 2	97.60	1.02	14.00	13.97	1.01	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Right Side	0	114	Ant 2	DSI = 2	97.60	1.02	14.00	13.97	1.01	-0.11	0.899	0.93
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	Ant 2	DSI = 2	97.60	1.02	14.00	13.97	1.01	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Bottom Side	0	114	Ant 2	DSI = 2	97.60	1.02	14.00	13.97	1.01	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Rear Face	0	114	Ant 1+2	DSI = 2	98.20	1.02	12.00	11.97	1.01	0.02	0.116	0.12
	WLAN5.6G	802.11ac VHT160	Left Side	0	114	Ant 1+2	DSI = 2	98.20	1.02	12.00	11.97	1.01	-0.03	0.145	0.15
	WLAN5.6G	802.11ac VHT160	Right Side	0	114	Ant 1+2	DSI = 2	98.20	1.02	12.00	11.97	1.01	0.06	0.278	0.29
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	Ant 1+2	DSI = 2	98.20	1.02	12.00	11.97	1.01	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Bottom Side	0	114	Ant 1+2	DSI = 2	98.20	1.02	12.00	11.97	1.01	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Bottom	0	114	Ant 2	DSI = 1	97.60	1.02	12.00	11.92	1.02	0.06	1.03	1.07

Body SAR Test Result

System & Position						DUT & Accessory		SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	Ant Status	Power Level	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)
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	Ant 1	DSI = 0	98.30	1.02	11.00	10.98	1.00	0.08	0.551	0.56
	WLAN5.8G	802.11ac VHT80	Bottom	6	155	Ant 2	DSI = 0	96.50	1.04	15.00	14.99	1.00	0.06	0.24	0.25
	WLAN5.8G	802.11ac VHT80	Bottom	6	155	Ant 1+2	DSI = 0	98.50	1.02	10.50	10.49	1.00	0.02	0.061	0.06
4	WLAN5.8G	802.11ac VHT80	Bottom	0	155	Ant 2	DSI = 1	96.50	1.04	12.00	11.86	1.03	-0.06	0.629	0.67
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	Ant 1+2	DSI = 1	98.50	1.02	9.00	8.86	1.03	0.01	0.223	0.23
	WLAN5.8G	802.11ac VHT80	Rear Face	0	155	Ant 1	DSI = 2	98.30	1.02	15.00	14.93	1.02	0.08	0.138	0.14
	WLAN5.8G	802.11ac VHT80	Left Side	0	155	Ant 1	DSI = 2	98.30	1.02	15.00	14.93	1.02	0.03	0.413	0.43
	WLAN5.8G	802.11ac VHT80	Right Side	0	155	Ant 1	DSI = 2	98.30	1.02	15.00	14.93	1.02	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	Ant 1	DSI = 2	98.30	1.02	15.00	14.93	1.02	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Bottom Side	0	155	Ant 1	DSI = 2	98.30	1.02	15.00	14.93	1.02	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Rear Face	0	155	Ant 2	DSI = 2	96.50	1.04	14.00	13.93	1.02	0.02	0.105	0.11
	WLAN5.8G	802.11ac VHT80	Left Side	0	155	Ant 2	DSI = 2	96.50	1.04	14.00	13.93	1.02	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Right Side	0	155	Ant 2	DSI = 2	96.50	1.04	14.00	13.93	1.02	-0.06	0.493	0.52
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	Ant 2	DSI = 2	96.50	1.04	14.00	13.93	1.02	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Bottom Side	0	155	Ant 2	DSI = 2	96.50	1.04	14.00	13.93	1.02	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Rear Face	0	155	Ant 1+2	DSI = 2	98.50	1.02	12.00	11.88	1.03	0.02	0.068	0.07
	WLAN5.8G	802.11ac VHT80	Left Side	0	155	Ant 1+2	DSI = 2	98.50	1.02	12.00	11.88	1.03	0.06	0.111	0.12
	WLAN5.8G	802.11ac VHT80	Right Side	0	155	Ant 1+2	DSI = 2	98.50	1.02	12.00	11.88	1.03	0.09	0.253	0.27
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	Ant 1+2	DSI = 2	98.50	1.02	12.00	11.88	1.03	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Bottom Side	0	155	Ant 1+2	DSI = 2	98.50	1.02	12.00	11.88	1.03	0	<0.001	0.00
	BT	BDR	Bottom	0	78	Ant 1	DSI = 0	100.00	1.00	11.00	10.81	1.04	0.05	0.283	0.29
	BT	BDR	Rear Face	0	78	Ant 1	DSI = 2	100.00	1.00	11.00	10.81	1.04	0	<0.001	0.00
	BT	BDR	Left Side	0	78	Ant 1	DSI = 2	100.00	1.00	11.00	10.81	1.04	0.02	0.088	0.09
	BT	BDR	Right Side	0	78	Ant 1	DSI = 2	100.00	1.00	11.00	10.81	1.04	0	<0.001	0.00
	BT	BDR	Top Side	0	78	Ant 1	DSI = 2	100.00	1.00	11.00	10.81	1.04	0	<0.001	0.00
	BT	BDR	Bottom Side	0	78	Ant 1	DSI = 2	100.00	1.00	11.00	10.81	1.04	0	<0.001	0.00
	BT	BDR	Bottom	0	0	Ant 1	DSI = 0	100.00	1.00	11.00	10.41	1.15	0.05	0.239	0.27
5	BT	BDR	Bottom	0	39	Ant 1	DSI = 0	100.00	1.00	11.00	10.72	1.07	0.09	0.344	0.37

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	Power Level	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/m ²]	Scaling Factor for Measurement Uncertainty	Averaging Area [cm ²]	Power Drift [dB]	Normal psPD [W/m ²]	Scaled Normal psPD [W/m ²]	Total psPD [W/m ²]	Scaled Total psPD [W/m ²]
	UNII-5	802.11ax HE160	Bottom	0	15	Ant 1	DSI = 0	97.40	1.03	11.50	11.49	1.00	-0.06	0.624	0.64	3.88	0.25	2.15	1.545	4.00	-0.05	2.21	3.52	2.52	4.01
	UNII-5	802.11ax HE160	Bottom	6	15	Ant 2	DSI = 0	97.60	1.02	13.50	13.48	1.00	0.15	0.53	0.54	3.15									
	UNII-5	802.11ax HE160	Bottom	6	15	Ant 1+2	DSI = 0	98.70	1.01	10.00	9.99	1.00	0.03	0.117	0.12	1.12	0.25	0.69	1.545	4.00	-0.07	0.72	1.12	0.88	1.37
6	UNII-7	802.11ax HE160	Bottom	0	143	Ant 2	DSI = 1	98.60	1.01	10.25	10.24	1.00	0.08	1.06	1.07	5.24	0.25	4.11	1.545	4.00	0.11	4.02	6.27	4.3	6.71
	UNII-5	802.11ax HE160	Bottom	0	47	Ant 1+2	DSI = 1	97.80	1.02	10.00	9.91	1.02	0.1	0.327	0.34	2.6									
	UNII-5	802.11ax HE160	Rear Face	0	15	Ant 1	DSI = 2	97.40	1.03	13.50	13.48	1.00	0	0	0.00	0									
	UNII-5	802.11ax HE160	Left Side	0	15	Ant 1	DSI = 2	97.40	1.03	13.50	13.48	1.00	0.11	0.11	0.11	0.927									
	UNII-5	802.11ax HE160	Right Side	0	15	Ant 1	DSI = 2	97.40	1.03	13.50	13.48	1.00	0	0	0.00	0									
	UNII-5	802.11ax HE160	Top Side	0	15	Ant 1	DSI = 2	97.40	1.03	13.50	13.48	1.00	0	0	0.00	0									
	UNII-5	802.11ax HE160	Bottom Side	0	15	Ant 1	DSI = 2	97.40	1.03	13.50	13.48	1.00	0	0	0.00	0									
	UNII-5	802.11ax HE160	Rear Face	0	15	Ant 2	DSI = 2	97.60	1.02	13.50	13.49	1.00	-0.04	0.05	0.05	0.451									
	UNII-5	802.11ax HE160	Left Side	0	15	Ant 2	DSI = 2	97.60	1.02	13.50	13.49	1.00	0	0	0.00	0									
	UNII-5	802.11ax HE160	Right Side	0	15	Ant 2	DSI = 2	97.60	1.02	13.50	13.49	1.00	0.14	0.18	0.18	1.27									
	UNII-5	802.11ax HE160	Top Side	0	15	Ant 2	DSI = 2	97.60	1.02	13.50	13.49	1.00	0	0	0.00	0									
	UNII-5	802.11ax HE160	Bottom Side	0	15	Ant 2	DSI = 2	97.60	1.02	13.50	13.49	1.00	0	0	0.00	0									
	UNII-5	802.11ax HE160	Rear Face	0	15	Ant 1+2	DSI = 2	98.70	1.01	11.00	10.99	1.00	0	0	0.00	0									
	UNII-5	802.11ax HE160	Left Side	0	15	Ant 1+2	DSI = 2	98.70	1.01	11.00	10.99	1.00	0.19	0.081	0.08	0.627									
	UNII-5	802.11ax HE160	Right Side	0	15	Ant 1+2	DSI = 2	98.70	1.01	11.00	10.99	1.00	0.14	0.048	0.05	0.384									
	UNII-5	802.11ax HE160	Top Side	0	15	Ant 1+2	DSI = 2	98.70	1.01	11.00	10.99	1.00	0	0	0.00	0									
	UNII-5	802.11ax HE160	Bottom Side	0	15	Ant 1+2	DSI = 2	98.70	1.01	11.00	10.99	1.00	0	0	0.00	0									
	UNII-5	802.11ax HE160	Bottom	0	15	Ant 2	DSI = 1	98.60	1.01	10.25	10.22	1.01	0.15	0.755	0.77	4.23	0.25	2.74	1.545	4.00	-0.05	2.56	3.99	2.98	4.65
	UNII-5	802.11ax HE160	Bottom	0	47	Ant 2	DSI = 1	98.60	1.01	10.25	10.18	1.02	-0.04	0.858	0.88	4.55	0.25	3.20	1.545	4.00	-0.11	2.88	4.49	3.48	5.43
	UNII-5	802.11ax HE160	Bottom	0	79	Ant 2	DSI = 1	98.60	1.01	10.25	10.15	1.02	-0.09	0.74	0.76	4.71	0.25	2.51	1.545	4.00	0.08	2.61	4.07	3.01	4.7
	UNII-6	802.11ax HE160	Bottom	0	111	Ant 2	DSI = 1	98.60	1.01	10.25	10.24	1.00	0.03	0.883	0.89	4.89	0.25	3.68	1.545	4.00	0.03	3.58	5.59	3.84	5.99
	UNII-7	802.11ax HE160	Bottom	0	175	Ant 2	DSI = 1	98.60	1.01	10.25	10.18	1.02	0.02	0.597	0.62	3.91									
	UNII-8	802.11ax HE160	Bottom	0	207	Ant 2	DSI = 1	98.60	1.01	10.25	10.19	1.01	-0.11	0.521	0.53	2.89									
	UNII-7	802.11ax HE160	Bottom	0	143	Ant 2	DSI = 1	98.60	1.01	10.25	10.24	1.00	0.02	1.04	1.05	5.08									

Annex G. SAR Measurement Variability

SAR repeated measurement are shown as below.

Repeat SAR							
Plot	Band	Mode	Test Position	Ch.	Original Measured SAR-1g (W/kg)	1st Repeated SAR-1g (W/kg)	L/S Ratio
R01	WLAN2.4G	802.11b	Bottom	13	1.06	1.04	1.02
R02	WLAN5.3G	802.11ac VHT160	Bottom	50	1.02	0.998	1.02
R03	WLAN5.6G	802.11ac VHT160	Bottom	114	1.05	1.03	1.02
R06	UNII-7	802.11ax HE160	Bottom	143	1.06	1.04	1.02

Annex H. Analysis of Simultaneous Transmission SAR.

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 2.4G Ant 2 + BT Ant 1	Yes
B	WLAN 5G + BT	Yes
C	WLAN 6G + BT	Yes

Notes

1. The WLAN 2.4G, WLAN 5G and WLAN 6G cannot transmit simultaneously.

Simultaneous Transmission SAR Evaluation

Position	1	2	3	4	A (1 + 4)	B (2 + 4)	C (3 + 4)
	WLAN 2.4GHz Ant 2	Max WLAN 5GHz	Max WLAN 6E	BT Ant 1	Summing result 1g SAR W/kg	Summing result 1g SAR W/kg	Summing result 1g SAR W/kg
	1g SAR W/kg	1g SAR W/kg	1g SAR W/kg	1g SAR W/kg			
Bottom	1.10	1.09	1.07	0.37	1.47	1.46	1.44
Rear Face	0.00	0.21	0.05	0.00	0.00	0.21	0.05
Left Side	0.00	0.70	0.08	0.09	0.09	0.79	0.17
Right Side	0.29	0.93	0.18	0.00	0.29	0.93	0.18
Top Side	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bottom Side	0.00	0.00	0.00	0.00	0.00	0.00	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	1029	Feb. 10, 2021	1 Year
System Verification Source	SPEAG	5G Verification Source 10 GHz	1025	Jan. 19, 2021	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	7537	Apr. 26, 2021	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	7554	Aug. 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	1585	Apr. 15, 2021	1 Year
Data Acquisition Electronics	SPEAG	DAE4	1589	Aug. 20, 2021	1 Year
Spectrum Analyzer	R&S	FSL6	102006	Apr. 06, 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.

$$\text{Duty Factor} = \text{Pulse Width} / \text{Total Period} = 100\%$$

Annex @ J Yf]Z]b['h Y'a YW Ub]ga 'cdYfU]cb'cZ5 WY Yfca YhYf!gYbgcf

The power verify when LCD angle changed are shown as below.

<Power Reduction by LCD Angle Changed and Verifying Power Level of DSI on Setp A ~ G>

Test Band : 802.11b Ant 2 for WLAN 2.4G Representative

Summary	<A> From lid closed when LCD is 0° which DSI = 0, opening the screen side in 10° each step until DSI = 1 is obtained.																																											
	Degrees	0	10	20	30	40	50																			160	170	180	190	200	210											
	Power (dBm)	18.0	18.2	18.0	18.0	17.8	18.4																			17.9	17.9	18.1	18.4	14.2	14.1											
The Power level changed by LCD Triggering Angle is 200°	 Close the screen side in 5° each step from Step A, until DSI = 0 is reobtained.																																											
	Degrees																			190	195	200	205	210																		
	Power (dBm)																			17.9	18.1	14.4	14.1	14.1																		
	<C> Verifying the power changed in 1° at each step.																																											
	Degrees																			198	199	200	201	202																		
	Power (dBm)																			18.0	18.1	14.3	14.2	13.8																		
	<D>Then Keep opening the screen side in 10° each step until fully open when LCD angle.																																											
	Degrees	0	10	20	30	40	50																			180	190	200	210	220						340	350	360				
	Power (dBm)	18.0	18.4	17.8	18.1	17.8	18.3																			18.2	18.4	14.2	14.0	14.0						13.8	14.5	13.9				
	<E> From fully open when LCD is 360° which DSI = 1, closing the screen side in 10° each step until DSI = 0 is obtained.																																											
Degrees	360	350	340	330	320	310																			210	200	190	180	170													
Power (dBm)	14.3	13.9	13.8	14.3	14.3	14.5																			14.3	13.9	18.0	18.1	17.8													
<F> From fully open when LCD is 360° which DSI = 1, closing the screen side in 5° each step until fully closed.																																												
Degrees	360	355	350	345	340	335	330	325	320	315	310														205	200	195						10	5	0							
Power (dBm)	13.9	13.9	14.4	14.5	14.4	13.9	13.8	14.4	13.8	14.3	14.3														13.9	14.0	18.1						14.0	14.0	14.0							
<G> Closing the screen side in 1° each step until DSI = 1 is obtained and keep closing until fully closed.																																												
Degrees	360	359	358	357	356	355	354	353	352	351	350														202	201	200	199	198	199	198						5	4	3	2	1	0
Power (dBm)	14.0	14.1	14.0	14.0	14.5	14.2	14.4	14.2	14.0	14.0	14.4														14.1	14.3	13.8	18.0	17.9	17.9	18.4						18.3	17.8	18.0	18.4	18.4	18.5

Test Band : 802.11a Ant 2 for WLAN 5.3G Representative

Summary	<A> From lid closed when LCD is 0° which DSI = 0, opening the screen side in 10° each step until DSI = 1 is obtained.																																											
	Degrees	0	10	20	30	40	50																			160	170	180	190	200	210											
	Power (dBm)	14.2	13.9	14.5	13.8	14.4	13.9																			14.0	13.8	14.1	14.2	13.2	13.5											
The Power level changed by LCD Triggering Angle is 200°	 Close the screen side in 5° each step from Step A, until DSI = 0 is reobtained.																																											
	Degrees																			190	195	200	205	210																		
	Power (dBm)																			14.5	13.8	13.5	13.1	13.0																		
	<C> Verifying the power changed in 1° at each step.																																											
	Degrees																			198	199	200	201	202																		
	Power (dBm)																			14.1	13.9	13.3	13.5	13.1																		
	<D>Then Keep opening the screen side in 10° each step until fully open when LCD angle.																																											
	Degrees	0	10	20	30	40	50																			180	190	200	210	220						340	350	360				
	Power (dBm)	14.3	14.5	13.8	13.9	14.2	14.3																			13.8	13.9	13.0	12.9	13.4						13.2	12.9	13.4				
	<E> From fully open when LCD is 360° which DSI = 1, closing the screen side in 10° each step until DSI = 0 is obtained.																																											
Degrees	360	350	340	330	320	310																			210	200	190	180	170													
Power (dBm)	13.3	12.8	13.5	13.5	13.0	12.8																			13.0	13.1	13.8	14.5	14.0													
<F> From fully open when LCD is 360° which DSI = 1, closing the screen side in 5° each step until fully closed.																																												
Degrees	360	355	350	345	340	335	330	325	320	315	310														205	200	195						10	5	0							
Power (dBm)	13.3	13.1	12.8	13.4	13.3	13.1	13.3	13.3	13.4	13.4	13.4														13.2	13.1	14.2						13.0	13.0	13.0							
<G> Closing the screen side in 1° each step until DSI = 1 is obtained and keep closing until fully closed.																																												
Degrees	360	359	358	357	356	355	354	353	352	351	350														202	201	200	199	198	199	198						5	4	3	2	1	0
Power (dBm)	13.3	12.8	12.9	13.5	12.9	13.5	13.5	13.0	13.2	13.3	13.4														13.5	13.0	13.4	13.9	14.5	14.2	14.5						13.9	14.1	14.0	13.8	13.9	14.4