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### 12.4.12 LTE Band 41 SPLSR and Volume Scan Analysis\_Sensor Off

LTE Band 41 Simultaneous										
Scenario	Non-RSDB(Sensor Off)								RSDB	
	Scenario No.1	Scenario No.2	Scenario No.3	Scenario No.4	Scenario No.5	Scenario No.6	Scenario No.7	Scenario No.8	Scenario No.9	Scenario No.10
SUM	①②	①⑥	①⑦	①③	①④⑤	①②⑥	①④⑤⑥	①④⑤⑦	①②④⑤⑥	①③④⑤
Rear	0.832	0.255	0.275	0.389	0.538	0.901	0.607	0.627	2.189	2.190
Left	0.167	0.024	0.174	0.713	1.232	0.167	1.232	1.382	0.691	0.683
Left Corner	0.461	0.800	0.431	0.548	0.685	0.861	1.085	0.716	1.227	0.840
Right	0.119	0.280	0.107	0.696	1.166	0.292	1.339	1.166	0.960	1.232
Right Corner	0.574	0.219	0.574	0.328	0.589	0.619	0.634	0.989	1.149	0.949
Top	0.331	0.322	0.267	0.438	0.418	0.408	0.495	0.440	0.959	1.034

Note: 1) Yellow highlight cells require SPLSR or Volume Scan analysis.

2) Non-RSDB = Licensed Band(Full Power) + WLAN(Full Power) + Bluetooth(Full Power)

3) RSDB = Licensed Band(Full Power) + WLAN(Power Back-off) + Bluetooth(Full Power)

LTE Band 41 SPLSR – Rear Position				
Scenario	Scenario No.9		Scenario No.10	
Rear	2.189		2.190	
Distance [mm]	①-②⑤	84.2	①-③④	52.3
	①-④⑥	52.3	①-③⑤	116.0
	②⑤-④⑥	136.0	③④-③⑤	168.0
SPLSR ≤ 0.04 Limit	①-②⑤	0.02	①-③④	0.02
	①-④⑥	0.01	①-③⑤	0.01
	②⑤-④⑥	0.01	③④-③⑤	0.02
Volume scan	Not Required		Not Required	

Note: Scenario No. 7 ~ 10 were analyzed according to the SPLSR hotspot combination procedure of the TCB Workshop Nov 2019.(Reference Section 12.5).

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## LTE Band 41 SPLSR – Rear Position

Scenario	Mode (Numbering)	SAR W/kg	Coordinates			Distance (mm)	SPLSR
			X	Y	Z		
Scenario No.9	LTE Band 41 (①)	0.186	0.032	-0.136	-0.183	84.2	0.02
	Wi-Fi 2.4 GHz Ant.2 (②) + Wi-Fi 5 GHz Ant.2 (⑤)	1.010	-0.052	-0.139	-0.178		
	LTE Band 41 (①)	0.186	0.032	-0.136	-0.183	52.3	0.01
	Wi-Fi 5 GHz Ant.1 (④) + Bluetooth Ant. 1 (⑥)	0.512	0.084	-0.139	-0.178		
	Wi-Fi 2.4 GHz Ant.2 (②) + Wi-Fi 5 GHz Ant.2 (⑤)	1.010	-0.052	-0.139	-0.178	136.0	0.01
	Wi-Fi 5 GHz Ant.1 (④) + Bluetooth Ant. 1 (⑥)	0.512	0.084	-0.139	-0.178		

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## LTE Band 41 SPLSR – Rear Position

Scenario	Mode (Numbering)	SAR W/kg	Coordinates			Distance (mm)	SPLSR
			X	Y	Z		
Scenario No.10	LTE Band 41 (①)	0.186	0.032	-0.136	-0.183	52.3	0.02
	Wi-Fi 2.4 GHz MIMO (③) + Wi-Fi 5 GHz Ant.1 (④)	0.926	0.084	-0.139	-0.178		
	LTE Band 41 (①)	0.186	0.032	-0.136	-0.183	116.0	0.01
	Wi-Fi 2.4 GHz MIMO (③) + Wi-Fi 5 GHz Ant.2 (⑤)	1.240	-0.084	-0.131	-0.178		
	Wi-Fi 2.4 GHz MIMO (③) + Wi-Fi 5 GHz Ant.1 (④)	0.926	0.084	-0.139	-0.178	168.0	0.02
	Wi-Fi 2.4 GHz MIMO (③) + Wi-Fi 5 GHz Ant.2 (⑤)	1.240	-0.084	-0.131	-0.178		

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### 12.4.13 LTE Band 66 SPLSR and Volume Scan Analysis\_Sensor Off

LTE Band 66 Simultaneous										
Scenario	Non-RSDB(Sensor Off)								RSDB	
	Scenario No.1	Scenario No.2	Scenario No.3	Scenario No.4	Scenario No.5	Scenario No.6	Scenario No.7	Scenario No.8	Scenario No.9	Scenario No.10
SUM	①②	①⑥	①⑦	①③	①④⑤	①②⑥	①④⑤⑥	①④⑤⑦	①②④⑤⑥	①③④⑤
Rear	1.027	0.450	0.470	0.584	0.733	1.096	0.802	0.822	2.384	2.385
Left	0.272	0.129	0.279	0.818	1.337	0.272	1.337	1.487	0.796	0.788
Left Corner	0.461	0.800	0.431	0.548	0.685	0.861	1.085	0.716	1.227	0.840
Right	0.243	0.403	0.231	0.820	1.290	0.415	1.462	1.290	1.083	1.356
Right Corner	0.575	0.220	0.575	0.329	0.590	0.620	0.635	0.990	1.150	0.949
Top	0.447	0.439	0.384	0.554	0.534	0.525	0.612	0.557	1.076	1.150

Note: 1) Yellow highlight cells require SPLSR or Volume Scan analysis.

2) Non-RSDB = Licensed Band(Full Power) + WLAN(Full Power) + Bluetooth(Full Power)

3) RSDB = Licensed Band(Full Power) + WLAN(Power Back-off) + Bluetooth(Full Power)

LTE Band 66 SPLSR – Rear Position				
Scenario	Scenario No.9		Scenario No.10	
Rear	2.384		2.385	
Distance [mm]	①-②⑤	82.9	①-③④	54.2
	①-④⑥	54.2	①-③⑤	116.0
	②⑤-④⑥	136.0	③④-③⑤	168.0
SPLSR ≤ 0.04 Limit	①-②⑤	0.02	①-③④	0.03
	①-④⑥	0.02	①-③⑤	0.02
	②⑤-④⑥	0.01	③④-③⑤	0.02
Volume scan	Not Required		Not Required	

Note: Scenario No. 7 ~ 10 were analyzed according to the SPLSR hotspot combination procedure of the TCB Workshop Nov 2019.(Reference Section 12.5).

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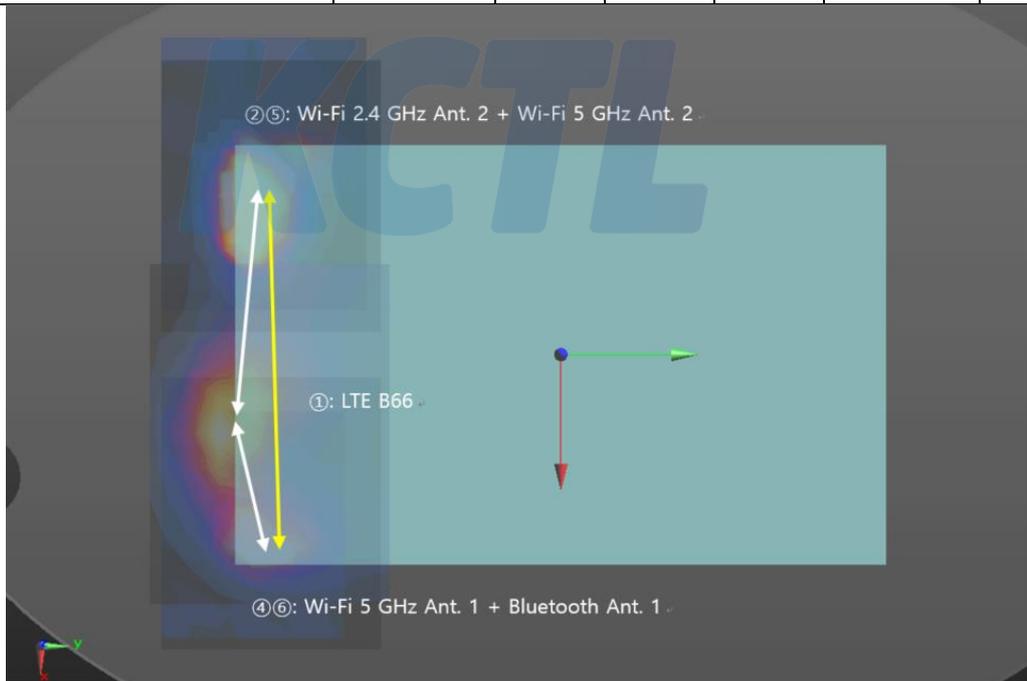
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## LTE Band 66 SPLSR – Rear Position

Scenario	Mode (Numbering)	SAR W/kg	Coordinates			Distance (mm)	SPLSR
			X	Y	Z		
Scenario No.9	LTE Band 66 (①)	0.381	0.031	-0.146	-0.183	82.9	0.02
	Wi-Fi 2.4 GHz Ant.2 (②) + Wi-Fi 5 GHz Ant.2 (⑤)	1.010	-0.052	-0.139	-0.178		
	LTE Band 66 (①)	0.381	0.031	-0.146	-0.183	54.2	0.02
	Wi-Fi 5 GHz Ant.1 (④) + Bluetooth Ant.1 (⑥)	0.512	0.084	-0.139	-0.178		
	Wi-Fi 2.4 GHz Ant.2 (②) + Wi-Fi 5 GHz Ant.2 (⑤)	1.010	-0.052	-0.139	-0.178	136.0	0.01
	Wi-Fi 5 GHz Ant.1 (④) + Bluetooth Ant.1 (⑥)	0.512	0.084	-0.139	-0.178		



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## LTE Band 66 SPLSR – Rear Position

Scenario	Mode (Numbering)	SAR W/kg	Coordinates			Distance (mm)	SPLSR
			X	Y	Z		
Scenario No.10	LTE Band 66 (①)	0.381	0.031	-0.146	-0.183	54.2	0.03
	Wi-Fi 2.4 GHz MIMO (③) + Wi-Fi 5 GHz Ant.1 (④)	0.926	0.084	-0.139	-0.178		
	LTE Band 66 (①)	0.381	0.031	-0.146	-0.183	116.0	0.02
	Wi-Fi 2.4 GHz MIMO (③) + Wi-Fi 5 GHz Ant.2 (⑤)	1.240	-0.084	-0.131	-0.178		
	Wi-Fi 2.4 GHz MIMO (③) + Wi-Fi 5 GHz Ant.1 (④)	0.926	0.084	-0.139	-0.178	168.0	0.02
	Wi-Fi 2.4 GHz MIMO (③) + Wi-Fi 5 GHz Ant.2 (⑤)	1.240	-0.084	-0.131	-0.178		



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**KCTL****12.5 Volume Scan for Hybrid SPLSR(Nov. 2019 TCB Workshop)****Nov. 2019 TCB Workshop (SPLSR Hotspot Combination)**

For devices whose simultaneous SAR is  $> 1.6$  W/kg and who do not meet the SPLSR criteria, enlarged zoom scan/volume scan procedure is available.

This procedure can be quite time consuming, especially for devices where antennas are spatially separated.

Often needed only because one co-located antenna pair does not meet SPLSR.

Hybrid SPLSR and enlarged zoom scan/volume scan approach now being considered.

Can only be applied when simultaneous transmission SAR is  $> 1.6$  W/kg, it does not meet SPLSR criteria, and antenna pair is co-located.

The Hybrid SPLSR was performed according to the following Test Procedure:

step1) Perform enlarged zoom scan/volume scan on the co-located antenna pair to determine 1g/10g aggregate SAR

Step2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair

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**1. Simultaneous Scenario**

No	Scenario	Hybrid SPLSR
1	Licensed Band + Wi-Fi 2.4 GHz Ant 2	Not Required
2	Licensed Band + Bluetooth Ant 1	Not Required
3	Licensed Band + Bluetooth Ant 2	Not Required
4	Licensed Band + Wi-Fi 2.4 GHz MIMO	Not Required
5	Licensed Band + Wi-Fi 5 GHz MIMO	Not Required
6	Licensed Band + Wi-Fi 2.4 GHz Ant 2 + Bluetooth Ant 1	Not Required
7	Licensed Band + Wi-Fi 5 GHz MIMO + Bluetooth Ant 1	Required
8	Licensed Band + Wi-Fi 5 GHz MIMO + Bluetooth Ant 2	Required
9	Licensed Band + Wi-Fi 2.4 GHz Ant 2 + Wi-Fi 5 GHz MIMO + Bluetooth Ant 1	Required
10	Licensed Band + Wi-Fi 2.4 GHz MIMO + Wi-Fi 5 GHz MIMO	Required

**2. Standalone SAR Numbering**

Licensed	Wi-Fi 2.4 GHz Ant 2	Wi-Fi 2.4 GHz MIMO	Wi-Fi 5 GHz Ant 1	Wi-Fi 5 GHz Ant 2	Bluetooth Ant 1	Bluetooth Ant 2
①	②	③	④	⑤	⑥	⑦

**3. Combination for Hybrid SPLSR**

No	Sensor On/Off	Position	Combination	Scenario
1	Sensor On	Rear	④+⑥	Wi-Fi 5 GHz Ant.1 + Bluetooth Ant 1
2			⑤+⑦	Wi-Fi 5 GHz Ant.2 + Bluetooth Ant 2
3			②+⑤	Wi-Fi 2.4 GHz Ant.2 + Wi-Fi 5 GHz Ant.2
4			③+④	Wi-Fi 2.4 GHz MIMO + Wi-Fi 5 GHz Ant.1
5			③+⑤	Wi-Fi 2.4 GHz MIMO + Wi-Fi 5 GHz Ant.2
6		Top	④+⑥	Wi-Fi 5 GHz Ant.1 + Bluetooth Ant 1
7			②+⑤	Wi-Fi 2.4 GHz Ant.2 + Wi-Fi 5 GHz Ant.2
8			③+④	Wi-Fi 2.4 GHz MIMO + Wi-Fi 5 GHz Ant.1
9			③+⑤	Wi-Fi 2.4 GHz MIMO + Wi-Fi 5 GHz Ant.2
10	Sensor Off	Rear	④+⑥	Wi-Fi 5 GHz Ant.1 + Bluetooth Ant 1

## 12.5.1 Volume Scan Plot for Hybrid SPLSR

### Wi-Fi 2.4 GHz Ant.2 Standalone Volume Scan Plot – Rear

Date: 2020-05-26

Test Laboratory: KCTL Inc.

File Name: [2. 2.4G\\_802.11\\_Body Back-off\\_Volume Scan\\_WLAN2\\_Rear.da53:0](#)

DUT: SM-T976B, Type: Mobile Phone, Serial: R32N4006KDX

Communication System: UID 0, 2.4GWLAN (0); Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.743$  S/m;  $\epsilon_r = 40.068$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2412 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

Configuration/802.11 b\_WLAN2\_CH1\_Rear\_0 mm Sensor On VS/Volume Scan

(61x26x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

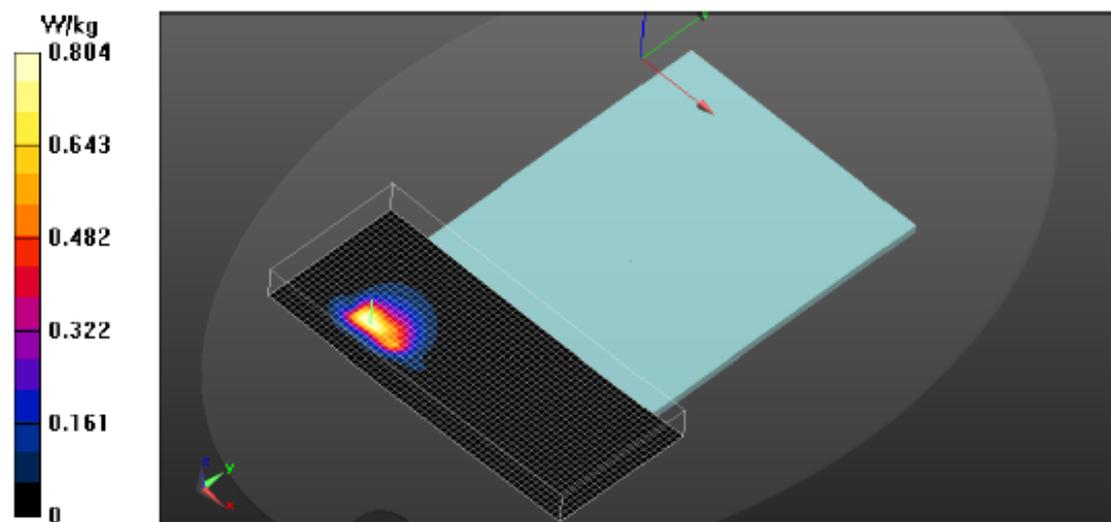
Reference Value = 18.44 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.494 W/kg; SAR(10 g) = 0.238 W/kg

Total Absorbed Power = 0.0149 W

Maximum value of SAR (measured) = 0.804 W/kg



**Wi-Fi 2.4 GHz MIMO Standalone Volume Scan Plot – Rear**

Date: 2020-05-26

Test Laboratory: KCTL Inc.

File Name: [3\\_2.4G\\_802.11\\_Body Back-off Volume Scan MIMO Rear.da53:0](#)

DUT: SM-T976B, Type: Mobile Phone, Serial: R32N4006KDX

Communication System: UID 0, 2.4GWLAN (0); Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.794$  S/m;  $\epsilon_r = 39.93$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2462 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

Configuration/802.11 b\_MIMO\_CH11\_Rear\_0 mm Sensor On VS/Volume Scan

(61x26x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

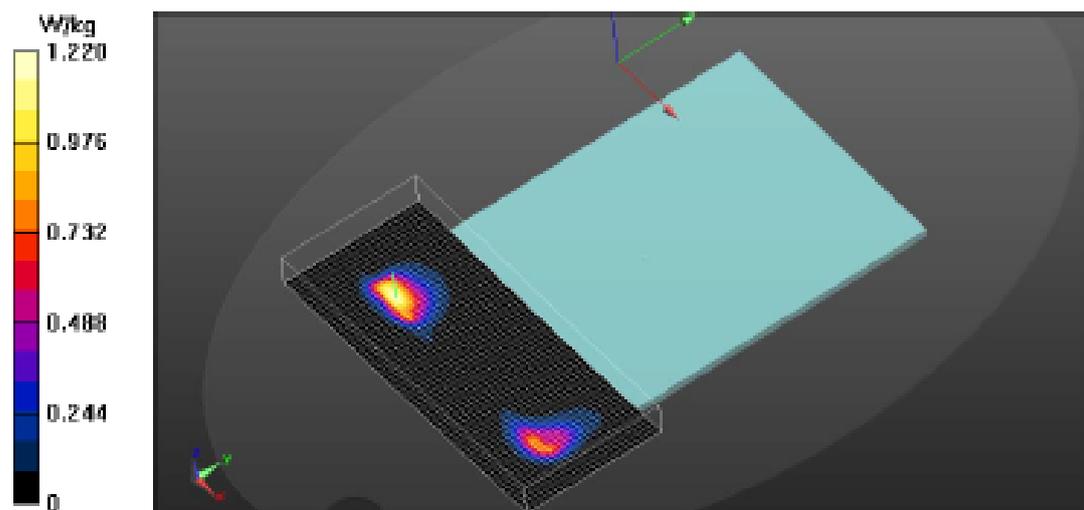
Reference Value = 21.80 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.98 W/kg

SAR(1 g) = 0.704 W/kg; SAR(10 g) = 0.321 W/kg

Total Absorbed Power = 0.0232 W

Maximum value of SAR (measured) = 1.22 W/kg



**Wi-Fi 5 GHz Ant.1 Standalone Volume Scan Plot - Rear**

Date: 2020-06-18

Test Laboratory: KCTL Inc.

File Name: [4.5.6G\\_802.11\\_Body\\_Back-off\\_Volume\\_Scan\\_WLAN1\\_Rear.da53:0](#)

DUT: SM-T976B, Type: Mobile Phone, Serial: R32N4006KDX

Communication System: UID 0, 5GWLAN (0); Frequency: 5610 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 5610$  MHz;  $\sigma = 4.993$  S/m;  $\epsilon_p = 35.112$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASYS Configuration:

- Probe: EK3DV4 - SN3928; ConvF(4.69, 4.69, 4.69) @ 5610 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASYS2, Version 52.10 (4);

Configuration/802.11 ac\_VHT80\_WLAN1\_CH122\_Rear\_0 mm Sensor On/Volume

Scan (61x20x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 11.03 V/m; Power Drift = -0.16 dB

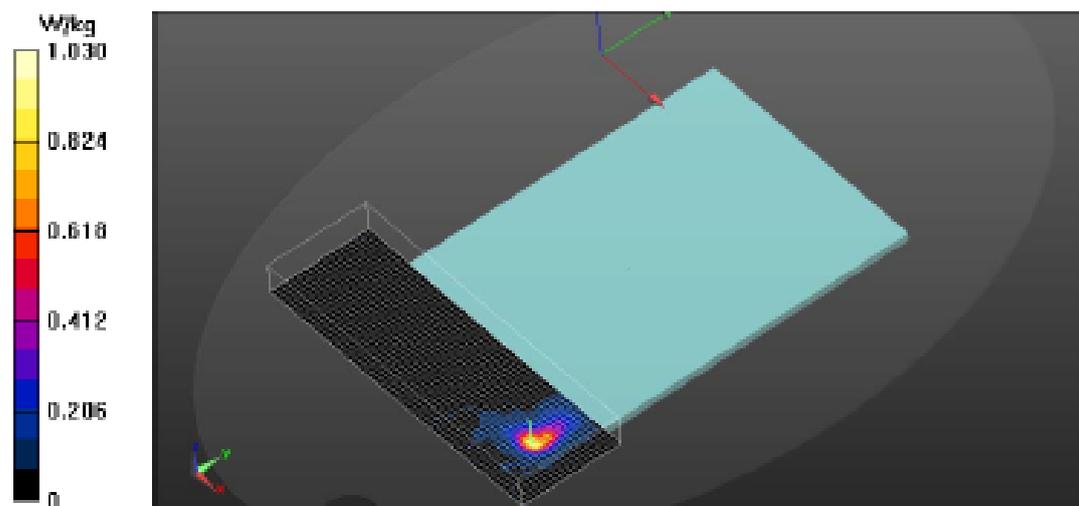
Peak SAR (extrapolated) = 3.08 W/kg

SAR(1 g) = 0.411 W/kg; SAR(10 g) = 0.181 W/kg

Total Absorbed Power = 0.0294 W

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.03 W/kg



**Wi-Fi 5 GHz Ant.2 Standalone Volume Scan Plot - Rear**

Date: 2020-06-20

Test Laboratory: KCTL Inc.

File Name: [5. 5.8G\\_802.11\\_Body\\_Back-off\\_Volume\\_Scan\\_WLAN2\\_Rear.da53:0](#)

DUT: SM-T976B, Type: Mobile Phone, Serial: R32N4006KDX

Communication System: UID 0, 5GWLAN (0); Frequency: 5775 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5775$  MHz;  $\sigma = 5.11$  S/m;  $\epsilon_r = 35.809$ ;  $\rho = 1000$  kg/m<sup>3</sup>

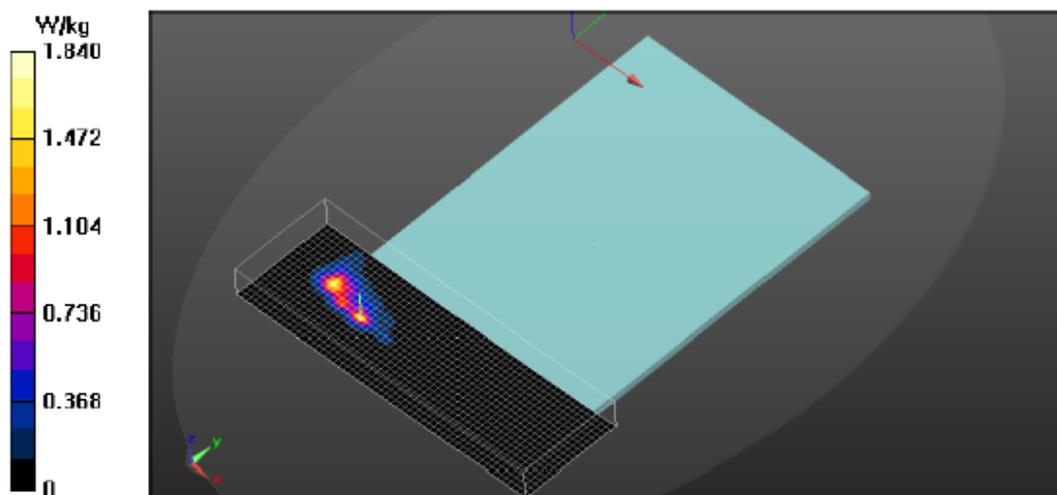
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(4.65, 4.65, 4.65) @ 5775 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

Configuration/802.11 ac\_VHT80\_WLAN2\_CH155\_Rear\_0 mm Sensor On/Volume Scan (61x20x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 16.01 V/m; Power Drift = -0.04 dB  
Peak SAR (extrapolated) = 6.38 W/kg  
SAR(1 g) = 0.638 W/kg; SAR(10 g) = 0.223 W/kg  
Total Absorbed Power = 0.0194 W

Maximum value of SAR (measured) = 1.84 W/kg



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## Bluetooth Ant.1 Standalone Volume Scan Plot - Rear

Date: 2020-06-22

Test Laboratory: KCTL Inc.

File Name: [6.Bluetooth GFSK DH5 Body Volume Scan Ant.1 Rear.da53:0](#)

DUT: SM-T976B, Type: Mobile Phone, Serial: R32N400EXHN

Communication System: UID 0, Bluetooth (0); Frequency: 2402 MHz; Duty Cycle: 1:1.30167  
Medium parameters used (interpolated):  $f = 2402$  MHz;  $\sigma = 1.719$  S/m;  $\epsilon_r = 39.057$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

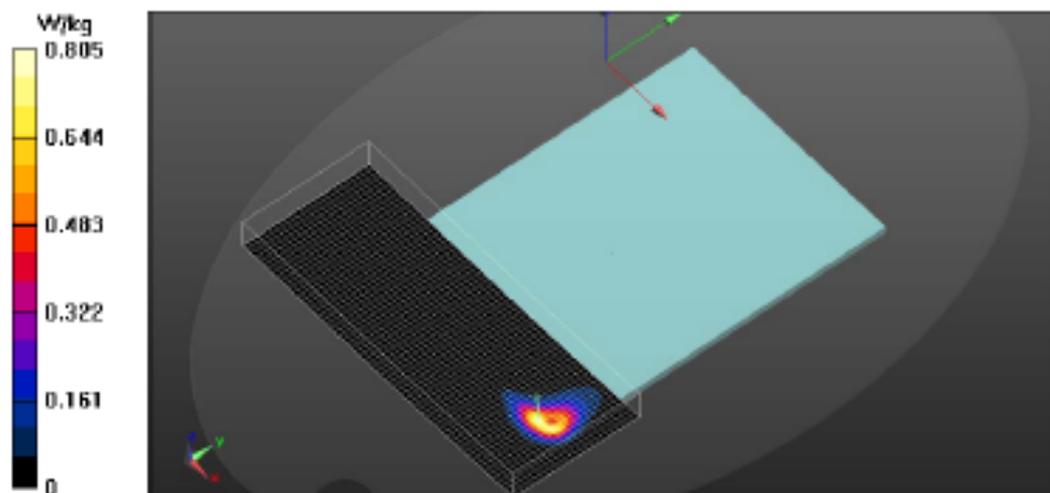
DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2402 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

Configuration/Bluetooth\_GFSK\_DH5\_Ant.1\_CH0\_Rear\_0 mm Sensor On/Volume Scan (66x26x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 23.46 V/m; Power Drift = 0.17 dB  
Peak SAR (extrapolated) = 1.38 W/kg  
SAR(1 g) = 0.376 W/kg; SAR(10 g) = 0.171 W/kg  
Total Absorbed Power = 0.00482 W

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.805 W/kg



**Bluetooth Ant.2 Standalone Volume Scan Plot - Rear**

Date: 2020-06-21

Test Laboratory: KCTL Inc.

File Name: [7.Blueooth\\_GFSK\\_DH5\\_Body\\_Volume\\_Scan\\_Ant.2\\_Rear.da53:0](#)

DUT: SM-I976B, Type: Mobile Phone, Serial: R32N400EXHN

Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz; Duty Cycle:  
1:1.30167Medium parameters used (interpolated):  $f = 2441$  MHz;  $\sigma = 1.775$  S/m;  $\epsilon_r = 38.845$ ;  $\rho = 1000$   
kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2441 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

Configuration/Bluetooth\_GFSK\_DH5\_Ant.2\_CH39\_Rear\_0 mm Sensor On/Volume  
Scan (66x26x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 19.49 V/m; Power Drift = 0.07 dB

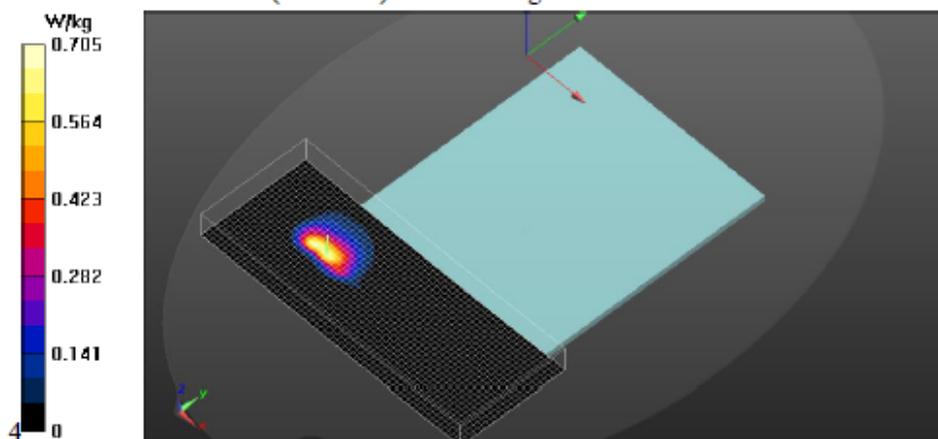
Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.402 W/kg; SAR(10 g) = 0.179 W/kg

Total Absorbed Power = 0.00461 W

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.705 W/kg



**Bluetooth Ant.1 Standalone Volume Scan Plot – Rear (Sensor Off)**

Date: 2020-06-17

Test Laboratory: KCTL Inc.

File Name: [1.Blueooth\\_GFSK\\_DH5\\_Body.da53:0](#)

DUT: SM-T976B, Type: Mobile Phone, Serial: R32N400EXHN

Communication System: UID 0, Bluetooth (0); Frequency: 2402 MHz; Duty Cycle:  
1:1.30167Medium parameters used (interpolated):  $f = 2402$  MHz;  $\sigma = 1.741$  S/m;  $\epsilon_r = 38.695$ ;  $\rho = 1000$   
kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2402 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

Configuration/Bluetooth\_GFSK\_DH5\_Ant.1\_CH0\_Rear\_18 mm VS/Volume Scan  
(31x26x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 6.374 V/m; Power Drift = 0.04 dB

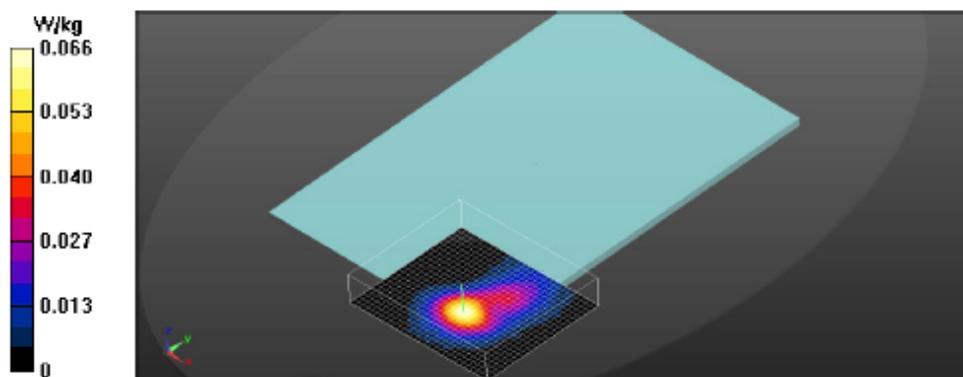
Peak SAR (extrapolated) = 0.0840 W/kg

SAR(1 g) = 0.041 W/kg; SAR(10 g) = 0.020 W/kg

Total Absorbed Power = 0.000883 W

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.0664 W/kg



**Wi-Fi 2.4 GHz Ant.2 Standalone Volume Scan Plot - Top**

Date: 2020-05-26

Test Laboratory: KCTL Inc.

File Name: [2. 2.4G\\_802.11\\_Body Back-off\\_Volume Scan\\_Top\\_WLAN2.da53:0](#)

DUT: SM-T976B, Type: Mobile Phone, Serial: R32N4006KDX

Communication System: UID 0, 2.4GWLAN (0); Frequency: 2412 MHz; Duty Cycle: 1:1

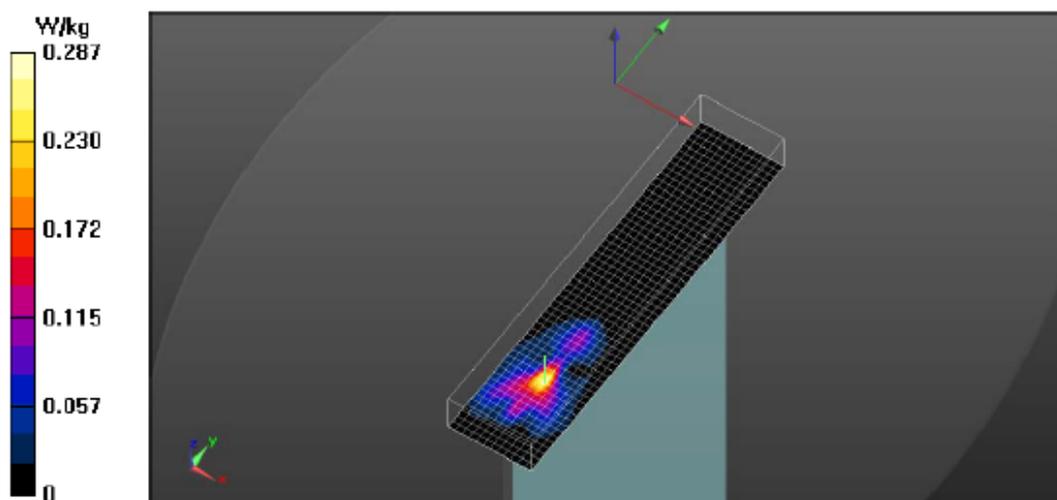
Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.743$  S/m;  $\epsilon_r = 40.068$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2412 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 5/802.11\_b\_WLAN2\_CH1\_Top\_0 mm Sensor On VS/Volume Scan (13x56x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 13.02 V/m; Power Drift = 0.09 dB  
Peak SAR (extrapolated) = 0.455 W/kg  
SAR(1 g) = 0.124 W/kg; SAR(10 g) = 0.043 W/kg  
Total Absorbed Power = 0.00138 W  
Maximum value of SAR (measured) = 0.287 W/kg



**Wi-Fi 2.4 GHz MIMO Standalone Volume Scan Plot - Top**

Date: 2020-05-26

Test Laboratory: KCTL Inc.

File Name: [3. 2.4G\\_802.11\\_Body Back-off\\_Volume Scan\\_MIMO\\_Top.da53:0](#)

DUT: SM-T976B, Type: Mobile Phone, Serial: R32N4006KDX

Communication System: UID 0, 2.4G WLAN (0); Frequency: 2462 MHz; Duty Cycle: 1:1

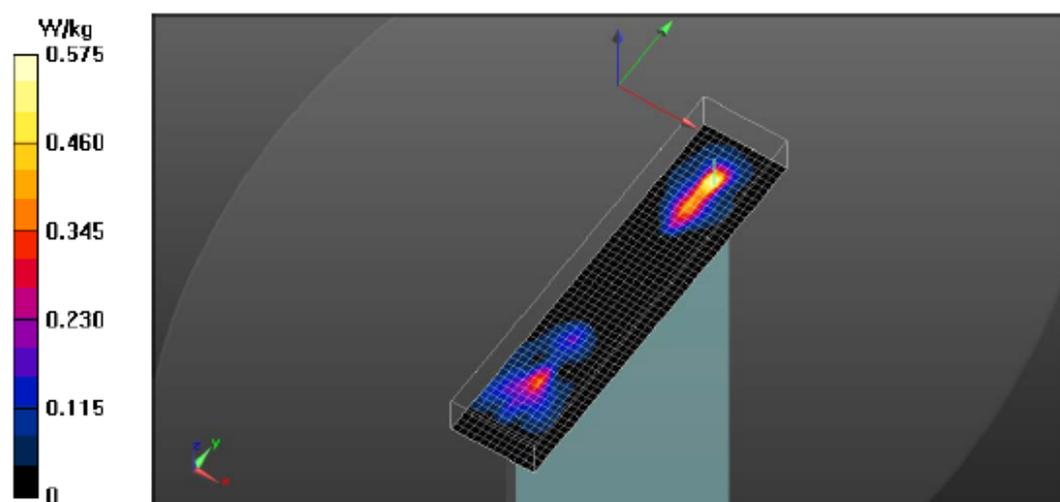
Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.794$  S/m;  $\epsilon_r = 39.93$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2462 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 5/802.11\_b\_MIMO\_CH11\_Top\_0 mm Sensor On VS/Volume Scan (13x56x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 11.50 V/m; Power Drift = -0.17 dB  
Peak SAR (extrapolated) = 1.35 W/kg  
SAR(1 g) = 0.236 W/kg; SAR(10 g) = 0.082 W/kg  
Total Absorbed Power = 0.00442 W  
Maximum value of SAR (measured) = 0.575 W/kg



**Wi-Fi 5 GHz Ant.1 Standalone Volume Scan Plot - Top**

Date: 2020-06-18

Test Laboratory: KCTL Inc.

File Name: [4\\_5.6G\\_802.11\\_Body\\_Back-off\\_Volume\\_Scan\\_WLAN1\\_Top.da53:0](#)

DUT: SM-T976B, Type: Mobile Phone, Serial: R32N400EXHN

Communication System: UID 0, 5GWLAN (0); Frequency: 5610 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 5610$  MHz;  $\sigma = 4.993$  S/m;  $\epsilon_r = 35.112$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(4.69, 4.69, 4.69) @ 5610 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

Configuration 5/802.11 ac\_VHT80\_WLAN1\_CH122\_Top\_0 mm Sensor

On\_VS/Volume Scan (13x56x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 6.885 V/m; Power Drift = -0.10 dB

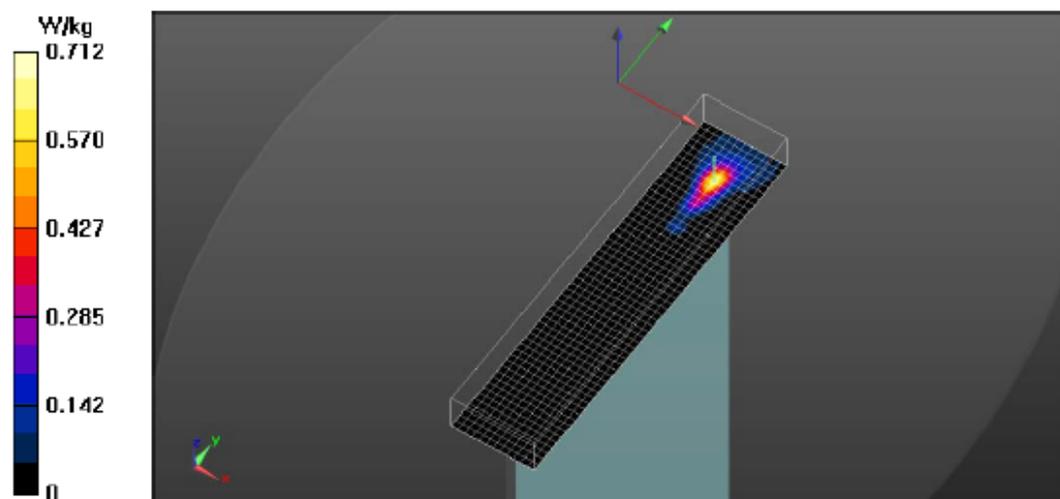
Peak SAR (extrapolated) = 1.21 W/kg

SAR(1 g) = 0.232 W/kg; SAR(10 g) = 0.057 W/kg

Total Absorbed Power = 0.00102 W

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.712 W/kg



**Wi-Fi 5 GHz Ant.2 Standalone Volume Scan Plot - Top**

Date: 2020-06-20

Test Laboratory: KCTL Inc.

File Name: [5. 5.8G\\_802.11\\_Body\\_Back-off\\_Volume Scan\\_WLAN2\\_Top.da53:0](#)

DUT: SM-T976B, Type: Mobile Phone, Serial: R32N400EXHN

Communication System: UID 0, 5G WLAN (0); Frequency: 5775 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5775$  MHz;  $\sigma = 5.11$  S/m;  $\epsilon_r = 35.809$ ;  $\rho = 1000$  kg/m<sup>3</sup>

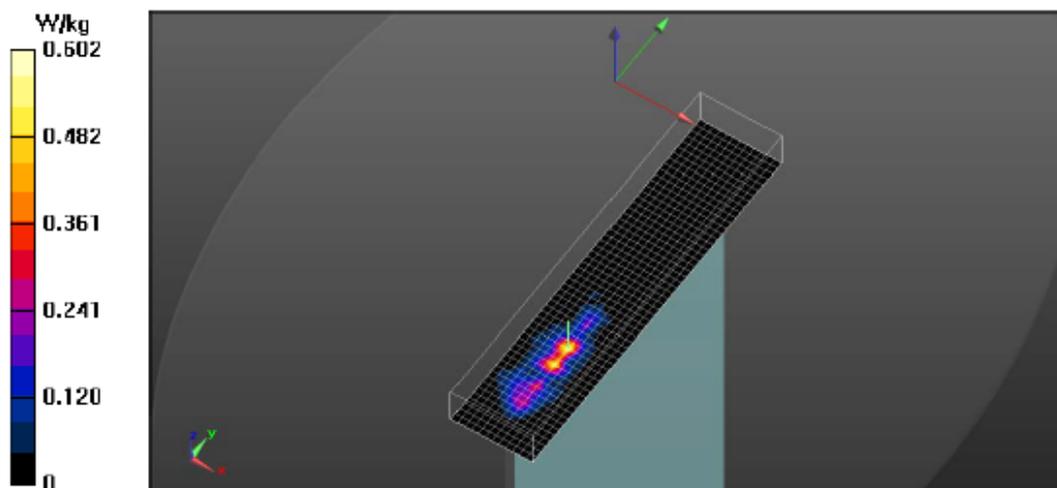
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(4.65, 4.65, 4.65) @ 5775 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

Configuration 5/802.11 ac\_VHT80\_WLAN2\_CH155\_Top\_0 mm Sensor On\_VS  
2/Volume Scan (13x56x7); Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 6.400 V/m; Power Drift = 0.15 dB  
Peak SAR (extrapolated) = 1.06 W/kg  
SAR(1 g) = 0.155 W/kg; SAR(10 g) = 0.043 W/kg  
Total Absorbed Power = 0.00102 W

Maximum value of SAR (measured) = 0.602 W/kg



**Bluetooth Ant.1 Standalone Volume Scan Plot - Top**

Date: 2020-06-22

Test Laboratory: KCTL Inc.

File Name: [6.Blueetooth\\_GFSK\\_DH5\\_Body\\_Volume\\_Scan\\_WLAN1\\_Top.da53:0](#)

DUT: SM-T976B, Type: Mobile Phone, Serial: R32N400EXHN

Communication System: UID 0, Bluetooth (0); Frequency: 2402 MHz; Duty Cycle: 1:1.30167  
Medium parameters used (interpolated):  $f = 2402$  MHz;  $\sigma = 1.719$  S/m;  $\epsilon_r = 39.057$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

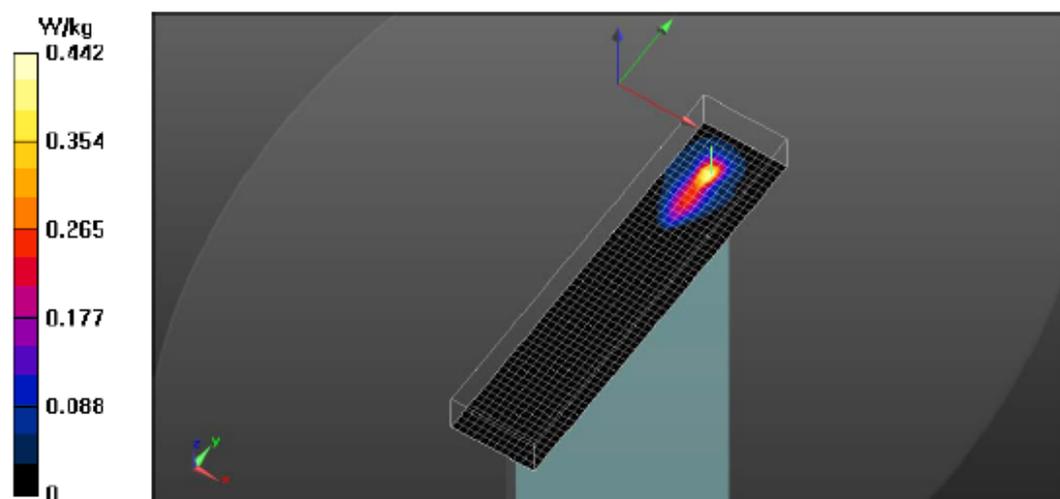
DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2402 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

Configuration 5/Bluetooth\_GFSK\_DH5\_Ant.1\_CH0\_Top\_0 mm Sensor On/Volume Scan (13x56x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 12.63 V/m; Power Drift = -0.16 dB  
Peak SAR (extrapolated) = 0.934 W/kg  
SAR(1 g) = 0.172 W/kg; SAR(10 g) = 0.056 W/kg  
Total Absorbed Power = 0.00145 W

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.442 W/kg



**Bluetooth Ant.2 Standalone Volume Scan Plot - Top**

Date: 2020-06-21

Test Laboratory: KCTL Inc.

File Name: [7.Bluetooth\\_GFSK\\_DH5\\_Body\\_Volume\\_Scan\\_WLAN2\\_Top.da53:0](#)

DUT: SM-T976B, Type: Mobile Phone, Serial: R32N400EXHN

Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz; Duty Cycle: 1:1.30167  
Medium parameters used (interpolated):  $f = 2441$  MHz;  $\sigma = 1.775$  S/m;  $\epsilon_r = 38.845$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2441 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

Configuration 5/Bluetooth\_GFSK\_DH5\_Ant.2\_CH39\_Top\_0 mm Sensor

On/Volume Scan (13x56x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

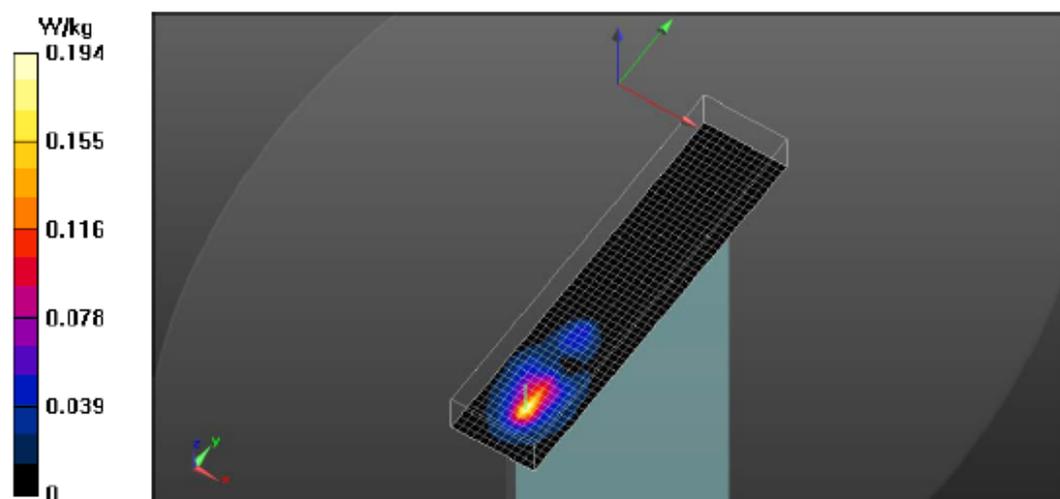
Peak SAR (extrapolated) = 0.322 W/kg

SAR(1 g) = 0.067 W/kg; SAR(10 g) = 0.024 W/kg

Total Absorbed Power = 0.000640 W

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.194 W/kg



**12.5.2 Volume Scan Summation for Hybrid SPLSR**

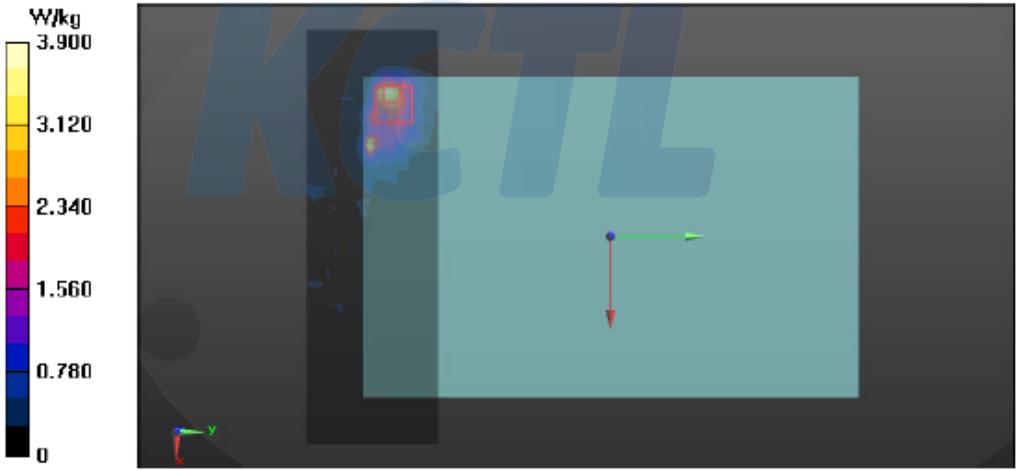
No.	Position	Mode	SAR W/kg	Coordinates		
				X	Y	Z
1	Rear	Wi-Fi 5 GHz Ant.1 + Bluetooth Ant 1	0.886	0.084	-0.127	-0.178
	<p><b>Multi-Band Average SAR</b></p> <p><b>Multi-Band Configurations:</b></p> <p>DASY Configuration for Configuration/802.11 ac_VHT80_WLAN1_CH122_Rear_0 mm Sensor On/Volume Scan:</p> <hr/> <p>DASY Configuration for Configuration/Bluetooth_GFSK_DH5_Ant.1_CH0_Rear_0 mm Sensor On/Volume Scan:</p> <hr/> <p><b>Multi Band Result:</b>  SAR(1 g) = 0.886 W/kg; SAR(10 g) = 0.413 W/kg  Maximum value of SAR (interpolated) = 2.84 W/kg</p>					

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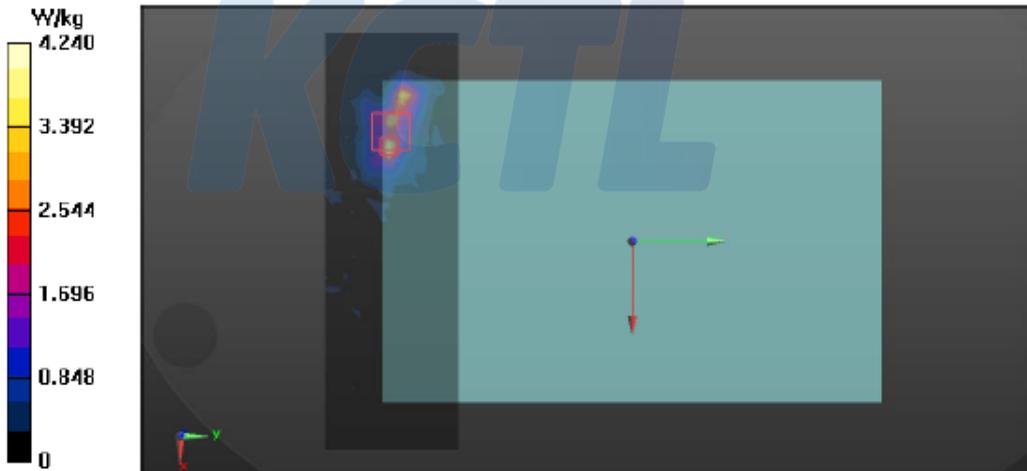
No.	Position	Mode	SAR W/kg	Coordinates		
				X	Y	Z
2	Rear	Wi-Fi 5 GHz Ant.2 + Bluetooth Ant 2	1.000	-0.084	-0.131	-0.178
	<p><b>Multi-Band Average SAR</b></p> <p><b>Multi-Band Configurations:</b></p> <p>DASY Configuration for Configuration/802.11 ac_VHT80_WLAN2_CH155_Rear_0 mm Sensor On/Volume Scan:</p> <hr/> <p>DASY Configuration for Configuration/Bluetooth_GFSK_DH5_Ant.2_CH39_Rear_0 mm Sensor On/Volume Scan:</p> <hr/> <p><b>Multi Band Result:</b> SAR(1 g) = 1 W/kg; SAR(10 g) = 0.430 W/kg Maximum value of SAR (interpolated) = 3.90 W/kg</p> 					

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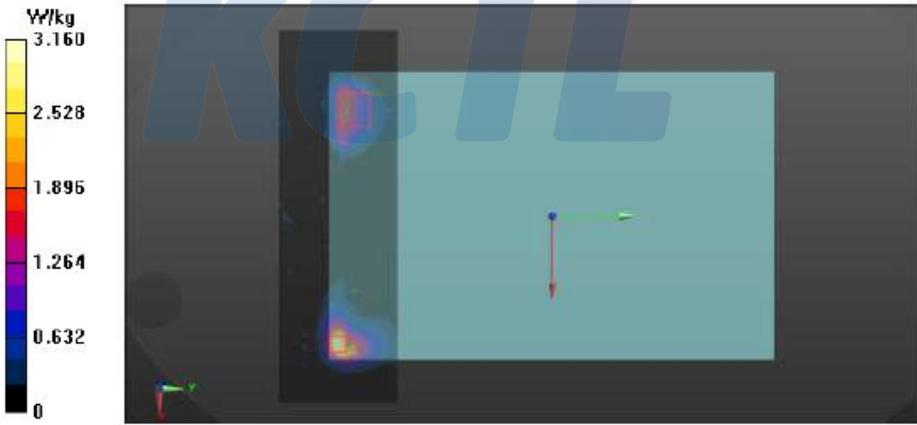
No.	Position	Mode	SAR W/kg	Coordinates		
				X	Y	Z
3	Rear	Wi-Fi 2.4 GHz Ant.2 + Wi-Fi 5 GHz Ant.2	1.010	-0.052	-0.139	-0.178
	<p><b>Multi-Band Average SAR</b></p> <p><b>Multi-Band Configurations:</b></p> <p>DASY Configuration for Configuration/802.11 ac_VHT80_WLAN2_CH155_Rear_0 mm Sensor On/Volume Scan:</p> <hr/> <p>DASY Configuration for Configuration/802.11 b_WLAN2_CH1_Rear_0 mm Sensor On VS/Volume Scan:</p> <hr/> <p><b>Multi Band Result:</b> SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.474 W/kg Maximum value of SAR (interpolated) = 4.24 W/kg</p> 					

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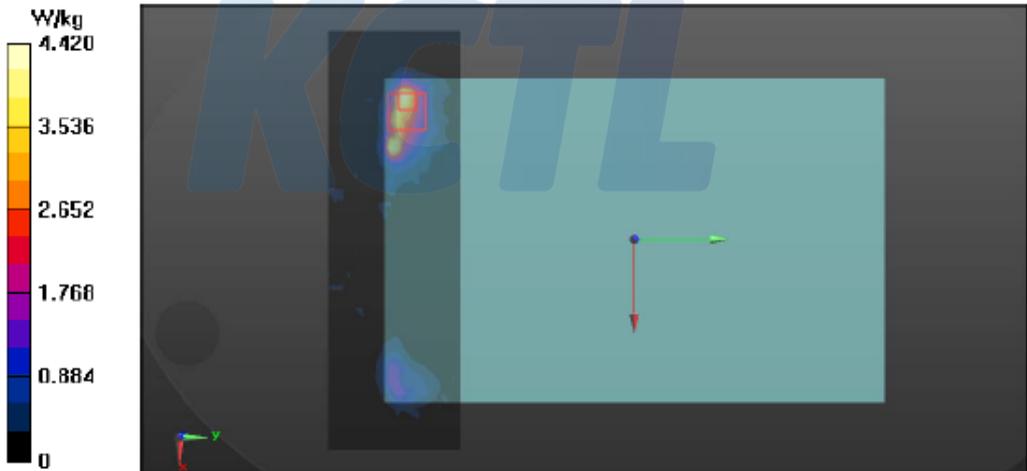
No.	Position	Mode	SAR W/kg	Coordinates		
				X	Y	Z
4	Rear	Wi-Fi 2.4 GHz MIMO + Wi-Fi 5 GHz Ant.1	0.926	0.084	-0.139	-0.178
	<p>Multi-Band Average SAR</p> <p>Multi-Band Configurations:</p> <p>DASY Configuration for Configuration/802.11 b_MIMO_CH11_Rear_0 mm Sensor On VS/Volume Scan:</p> <hr/> <p>DASY Configuration for Configuration/802.11 ac_VHT80_WLAN1_CH122_Rear_0 mm Sensor On/Volume Scan:</p> <hr/> <p>Multi Band Result: SAR(1 g) = 0.926 W/kg; SAR(10 g) = 0.448 W/kg Maximum value of SAR (interpolated) = 3.16 W/kg</p> 					

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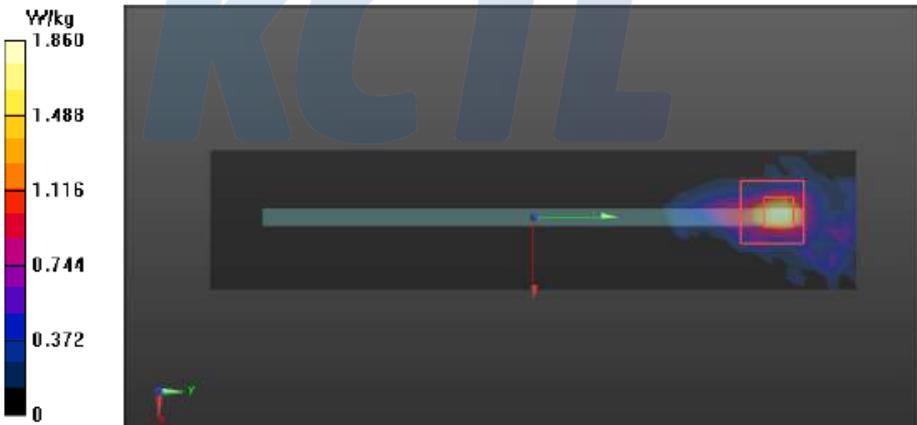
No.	Position	Mode	SAR W/kg	Coordinates		
				X	Y	Z
5	Rear	Wi-Fi 2.4 GHz MIMO + Wi-Fi 5 GHz Ant.2	1.240	-0.084	-0.131	-0.178
	<p><b>Multi-Band Average SAR</b></p> <p><b>Multi-Band Configurations:</b></p> <p>DASY Configuration for Configuration/802.11 b_MIMO_CH11_Rear_0 mm Sensor On VS/Volume Scan:</p> <hr/> <p>DASY Configuration for Configuration/802.11 ac_VHT80_WLAN2_CH155_Rear_0 mm Sensor On/Volume Scan:</p> <hr/> <p><b>Multi Band Result:</b> SAR(1 g) = 1.24 W/kg; SAR(10 g) = 0.592 W/kg Maximum value of SAR (interpolated) = 4.42 W/kg</p> 					

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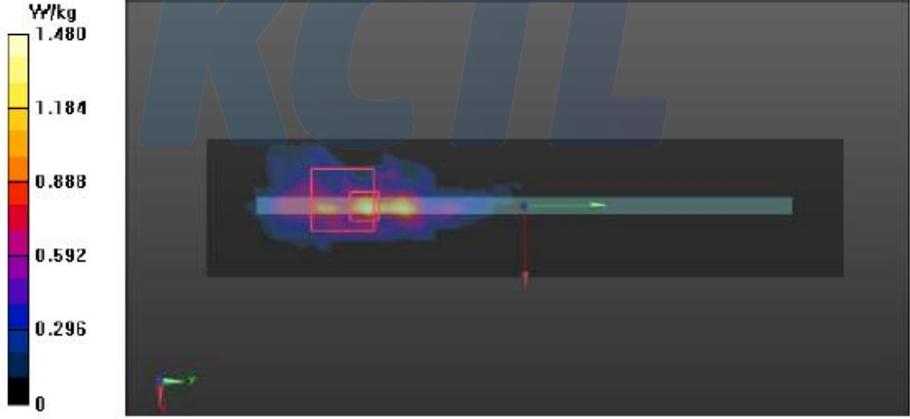
No.	Position	Mode	SAR W/kg	Coordinates		
				X	Y	Z
6	Top	Wi-Fi 5 GHz Ant.1 + Bluetooth Ant 1	0.486	0.001	0.082	-0.181
	<p>Multi-Band Average SAR</p> <p>Multi-Band Configurations:</p> <p>DASY Configuration for Configuration 5/802.11 ac_VHT80_WLAN1_CH122_Top_0 mm Sensor On_VS/Volume Scan:</p> <hr/> <p>DASY Configuration for Configuration 5/Bluetooth_GFSK_DH5_Ant.1_CH0_Top_0 mm Sensor On/Volume Scan:</p> <hr/> <p>Multi Band Result: SAR(1 g) = 0.486 W/kg; SAR(10 g) = 0.149 W/kg Maximum value of SAR (interpolated) = 1.86 W/kg</p> 					

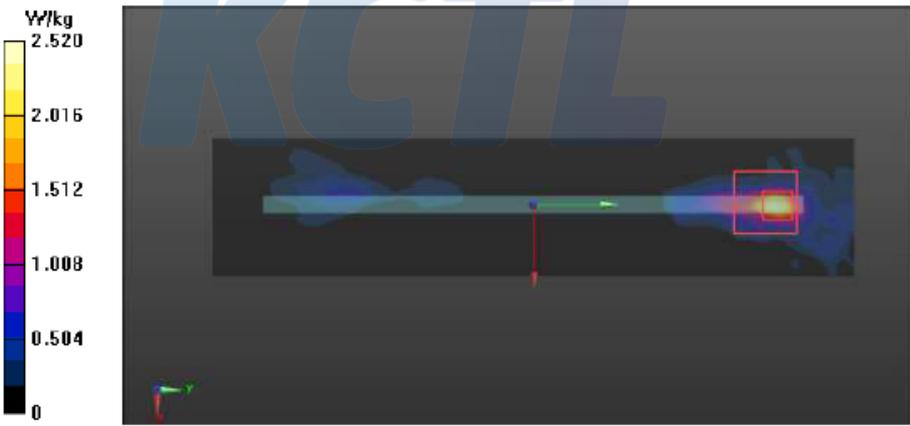
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No.	Position	Mode	SAR W/kg	Coordinates		
				X	Y	Z
7	Top	Wi-Fi 2.4 GHz Ant.2 + Wi-Fi 5 GHz Ant.2	0.283	0.001	-0.054	-0.181
	<p>Multi-Band Average SAR</p> <p>Multi-Band Configurations:</p> <p>DASY Configuration for Configuration 5/802,11 ac_VHT80_WLAN2_CH155_Top_0 mm Sensor On_VS 2/Volume Scan:</p> <hr/> <p>DASY Configuration for Configuration 5/802,11_b_WLAN2_CH1_Top_0 mm Sensor On VS/Volume Scan:</p> <hr/> <p>Multi Band Result: SAR(1 g) = 0.283 W/kg; SAR(10 g) = 0.088 W/kg Maximum value of SAR (interpolated) = 1.48 W/kg</p> 					

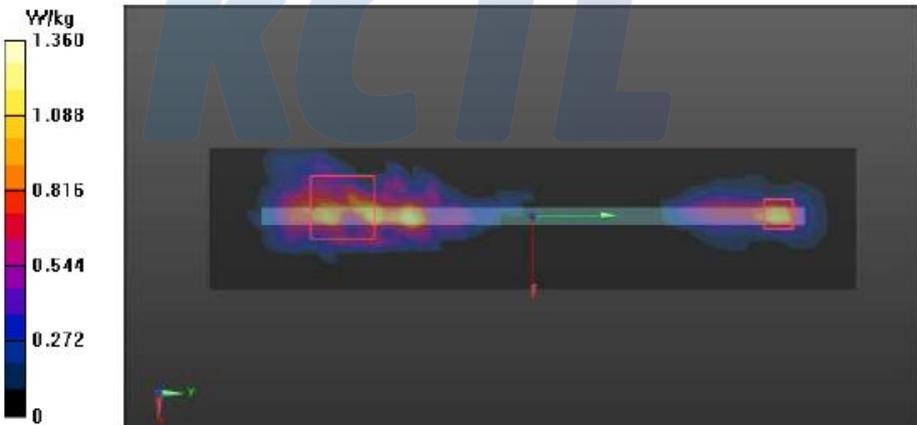
No.	Position	Mode	SAR W/kg	Coordinates		
				X	Y	Z
8	Top	Wi-Fi 2.4 GHz MIMO + Wi-Fi 5 GHz Ant.1	0.546	0.001	0.082	-0.181
	<p>Multi-Band Average SAR</p> <p>Multi-Band Configurations:</p> <p>DASY Configuration for Configuration 5/802.11_b_MIMO_CH11_Top_0 mm Sensor On VS/Volume Scan:</p> <hr/> <p>DASY Configuration for Configuration 5/802.11 ac_VHT80_WLAN1_CH122_Top_0 mm Sensor On_VS/Volume Scan:</p> <hr/> <p>Multi Band Result: SAR(1 g) = 0.546 W/kg; SAR(10 g) = 0.156 W/kg Maximum value of SAR (interpolated) = 2.52 W/kg</p> 					

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No.	Position	Mode	SAR W/kg	Coordinates		
				X	Y	Z
9	Top	Wi-Fi 2.4 GHz MIMO + Wi-Fi 5 GHz Ant.2	0.279	0.001	-0.042	-0.181
	<p>Multi-Band Average SAR</p> <p>Multi-Band Configurations:</p> <p>DASY Configuration for Configuration 5/802.11_b_MIMO_CH11_Top_0 mm Sensor On VS/Volume Scan:</p> <hr/> <p>DASY Configuration for Configuration 5/802.11 ac_VHT80_WLAN2_CH155_Top_0 mm Sensor On_VS 2/Volume Scan:</p> <hr/> <p>Multi Band Result: SAR(1 g) = 0.279 W/kg; SAR(10 g) = 0.104 W/kg Maximum value of SAR (interpolated) = 1.36 W/kg</p> 					

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No.	Position	Mode	SAR W/kg	Coordinates		
				X	Y	Z
10	Rear	Wi-Fi 5 GHz Ant.1 + Bluetooth Ant 1	0.512	0.084	-0.139	-0.178
	<p><b>Multi-Band Average SAR</b></p> <p><b>Multi-Band Configurations:</b></p> <p>DASY Configuration for Configuration/802.11 ac_VHT80_WLAN1_CH122_Rear_0 mm Sensor On/Volume Scan:</p> <hr/> <p>DASY Configuration for Configuration/Bluetooth_GFSK_DH5_Ant.1_CH0_Rear_18 mm VS/Volume Scan:</p> <hr/> <p><b>Multi Band Result:</b> SAR(1 g) = 0.512 W/kg; SAR(10 g) = 0.233 W/kg Maximum value of SAR (interpolated) = 1.96 W/kg</p> 					

### 13. Additional Simultaneous Transmission Analysis

This additional test applies to mixed simultaneous transmission.

According to KDB 447498 D01v06, When one of the following test exclusion conditions is satisfied for all combinations of simultaneous transmission configurations, further equipment approval is not required to incorporate transmitter modules in host devices that operate in the mixed mobile and portable host platform exposure conditions.

- a) The  $[\Sigma \text{ of (the highest measured or estimated SAR for each standalone antenna configuration, adjusted for maximum tune-up tolerance) / 1.6 W/kg}] + [\Sigma \text{ of MPE ratios}] \leq 1.0$
- b) The SAR to peak location separation ratios of all simultaneously transmitting antenna pairs operating in portable device exposure conditions are all  $\leq 0.04$ , and the  $[\Sigma \text{ of MPE ratios}] \leq 1.0$ .

Test exclusion condition a): The sum of the same evaluation positions.

$$\frac{\Sigma \text{ of Highest Reported SAR}}{\text{Limit}} + \frac{\text{Field Strength Measured}}{\text{Limit}} = \leq 1.0$$

Worst Case	Scenario	Limit									
		Scenario No.1	Scenario No.2	Scenario No.3	Scenario No.4	Scenario No.5	Scenario No.6	Scenario No.7	Scenario No.8	Scenario No.9	Scenario No.10
	SUM	①②	①⑥	①⑦	①③	①④⑤	①②⑥	①④⑤⑥	①④⑤⑦	①②④⑤⑥	①③④⑤
GSM1900	Rear	1.616	1.507	1.567	1.686	2.196	2.184	2.764	2.824	3.441	2.943
LTE 25	Left	0.424	0.353	0.832	0.416	0.949	0.424	0.949	1.428	1.020	1.012
LTE 25	Right	0.076	0.650	0.064	0.521	0.732	0.662	1.318	0.732	1.330	1.189
LTE 5	Top	1.081	1.208	1.05	1.233	1.446	1.344	1.709	1.551	1.845	1.734

Note: Yellow highlight calls require volume scan analysis.

Mixed simultaneous transmission analysis											
Worst Case	Scenario	Scenario No.1	Scenario No.2	Scenario No.3	Scenario No.4	Scenario No.5	Scenario No.6	Scenario No.7	Scenario No.8	Scenario No.9	Scenario No.10
GSM1900	Rear	0.847	0.945	0.945	0.961	0.949	0.955	1.060	1.060	1.070	1.290
LTE 25	Left	0.424	0.428	0.832	0.416	1.103	0.499	1.178	1.582	1.249	1.166
LTE 25	Right	0.129	0.652	0.167	0.521	0.944	0.717	1.532	1.047	1.597	1.401
LTE 5	Top	1.081	1.232	1.207	1.050	1.343	1.446	0.958	0.958	0.968	0.965
Limit		1.6 [W/kg]									
GSM1900	Rear	0.529	0.591	0.591	0.601	0.593	0.597	0.663	0.663	0.669	0.806
LTE 25	Left	0.265	0.221	0.520	0.260	0.593	0.265	0.593	0.893	0.638	0.633
LTE 25	Right	0.048	0.406	0.040	0.326	0.458	0.414	0.824	0.458	0.831	0.743
LTE 5	Top	0.676	0.770	0.754	0.656	0.839	0.904	0.599	0.599	0.605	0.603
Position		H-field Measurement [A/m]									
Rear / c		0.2820									
Left / b		0.0170									
Right / a		0.1287									
Top / e		0.0592									
Limit		1.63 [A/m]									
Rear / c		0.173									
Left / b		0.010									
Right / a		0.079									
Top / e		0.036									
Scenario	Scenario No.1	Scenario No.2	Scenario No.3	Scenario No.4	Scenario No.5	Scenario No.6	Scenario No.7	Scenario No.8	Scenario No.9	Scenario No.10	
Position	①②	①⑥	①⑦	①③	①④⑤	①②⑥	①④⑤⑥	①④⑤⑦	①②④⑤⑥	①③④⑤	
c	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.0	
b	0.3	0.2	0.5	0.3	0.6	0.3	0.6	0.9	0.6	0.6	
a	0.1	0.5	0.1	0.4	0.5	0.5	0.9	0.5	0.9	0.8	
e	0.7	0.8	0.8	0.7	0.9	0.9	0.6	0.6	0.6	0.6	

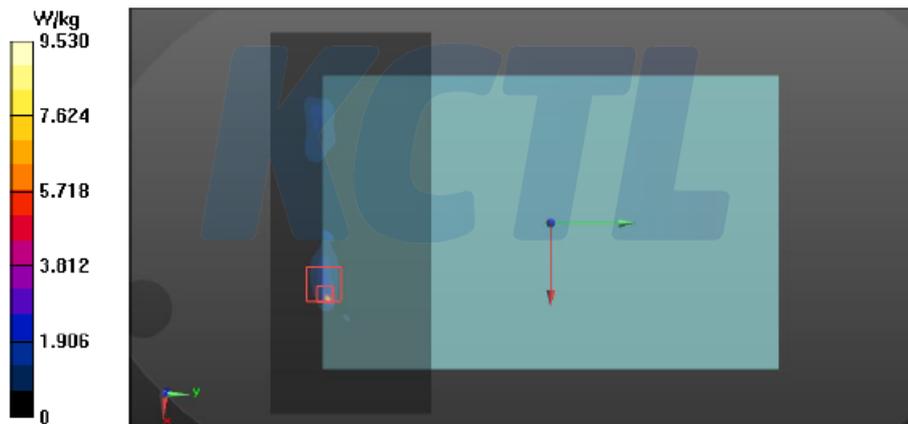
When the sum of ratios of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the 1.0 the additional equipment approval is not required.

**GSM 1900 Volume Scan – Rear Position**

Scenario No.1

①+②

Licensed Band + WLAN 2.4 GHz Ant.2 = 0.847 W/kg

**Multi-Band Average SAR****Multi-Band Configurations:**DASY Configuration for Configuration/GSM1900\_GPRS 2Tx\_CH661\_Rear\_0 mm  
Grip Sensor On\_VS/Volume Scan:DASY Configuration for Configuration/802.11 b\_WLAN2\_CH1\_Rear\_0 mm Sensor On  
VS/Volume Scan:**Multi Band Result:**SAR(1 g) = 0.847 W/kg; SAR(10 g) = 0.333 W/kg  
Maximum value of SAR (interpolated) = 9.53 W/kg

**GSM 1900 Volume Scan – Rear Position**

Scenario No.2

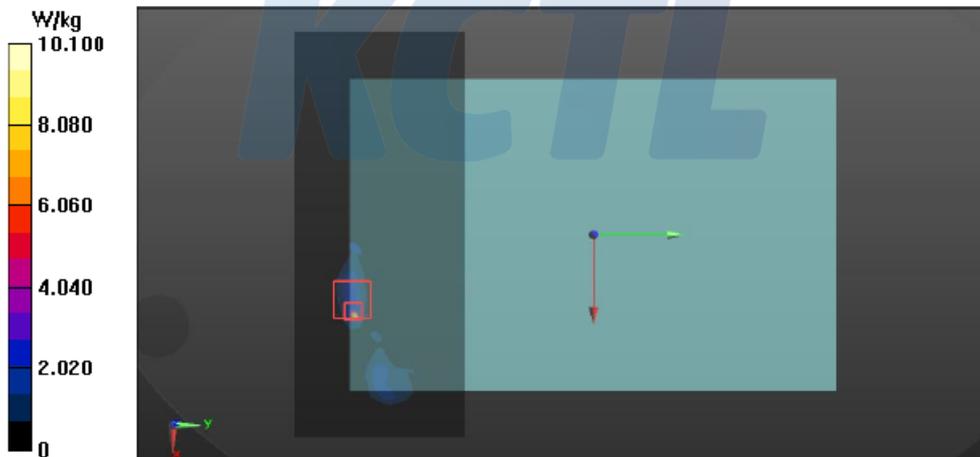
①+⑥

Licensed Band + Bluetooth Ant.1 = 0.945 W/kg

**Multi-Band Average SAR****Multi-Band Configurations:****DASY Configuration for Configuration/GSM1900\_GPRS 2Tx\_CH661\_Rear\_0 mm  
Grip Sensor On\_VS/Volume Scan:****DASY Configuration for Configuration/Bluetooth\_GFSK\_DH5\_Ant.1\_CH0\_Rear\_0  
mm Sensor On/Volume Scan:****Multi Band Result:**

SAR(1 g) = 0.945 W/kg; SAR(10 g) = 0.341 W/kg

Maximum value of SAR (interpolated) = 10.1 W/kg



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# KCTL

## GSM 1900 Volume Scan – Rear Position

Scenario No.3

①+⑦

Licensed Band + Bluetooth Ant.2 = 0.945 W/kg

### Multi-Band Average SAR

### Multi-Band Configurations:

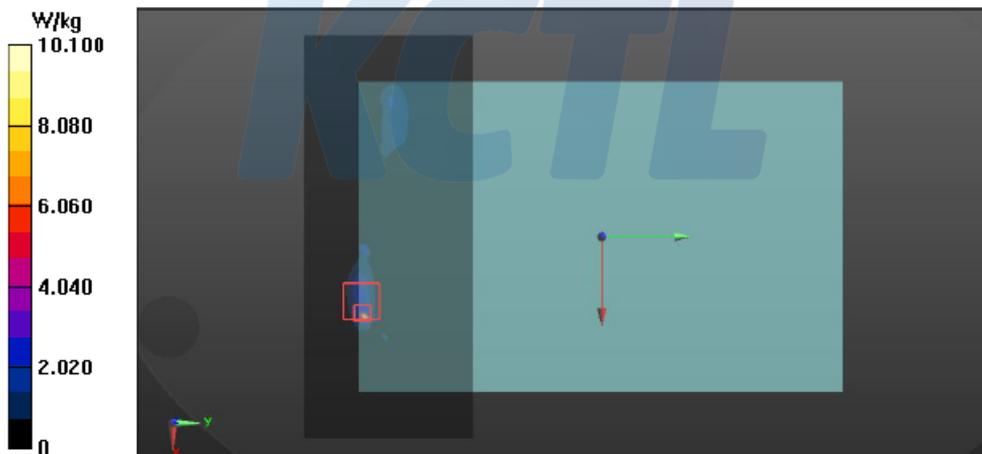
DASY Configuration for Configuration/GSM1900\_GPRS 2Tx\_CH661\_Rear\_0 mm  
Grip Sensor On\_VS/Volume Scan:

DASY Configuration for Configuration/Bluetooth\_GFSK\_DH5\_Ant.2\_CH39\_Rear\_0  
mm Sensor On/Volume Scan:

### Multi Band Result:

SAR(1 g) = 0.945 W/kg; SAR(10 g) = 0.340 W/kg

Maximum value of SAR (interpolated) = 10.1 W/kg



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## GSM 1900 Volume Scan – Rear Position

Scenario No.4  
①+③

Licensed Band + WLAN 2.4 GHz MIMO = 0.961 W/kg

### Multi-Band Average SAR

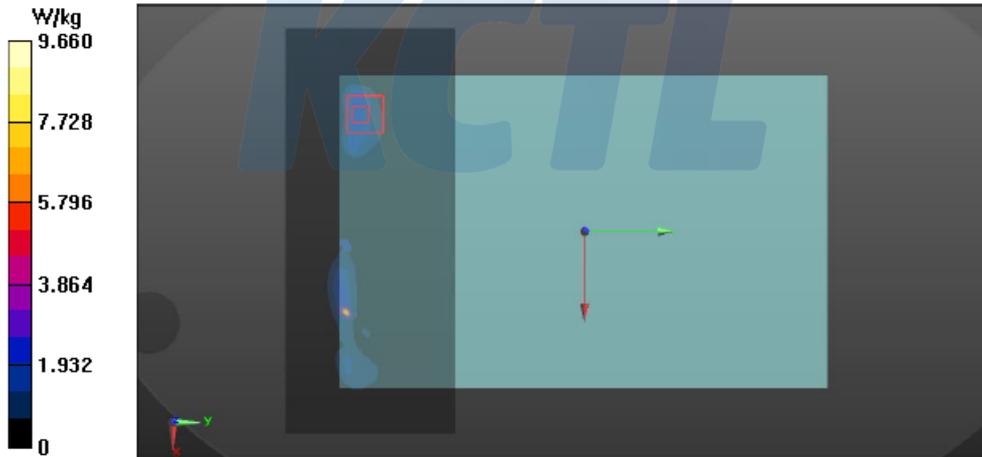
### Multi-Band Configurations:

DASY Configuration for Configuration/GSM1900\_GPRS 2Tx\_CH661\_Rear\_0 mm  
Grip Sensor On\_VS/Volume Scan:

DASY Configuration for Configuration/802.11 b\_MIMO\_CH11\_Rear\_0 mm Sensor On  
VS/Volume Scan:

### Multi Band Result:

SAR(1 g) = 0.961 W/kg; SAR(10 g) = 0.436 W/kg  
Maximum value of SAR (interpolated) = 9.66 W/kg

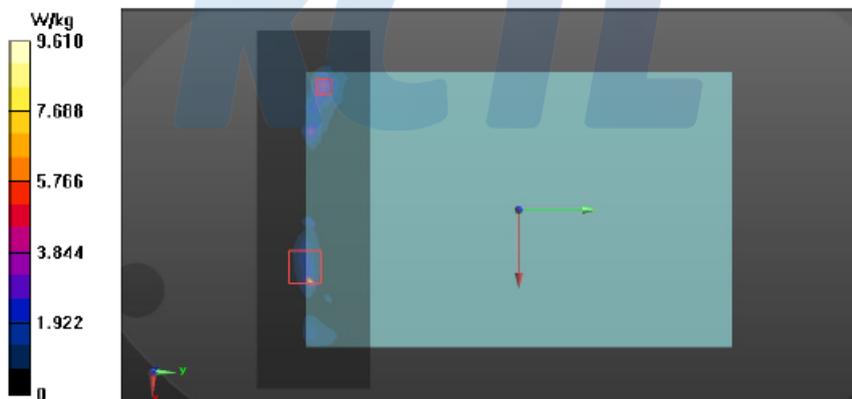


**GSM 1900 Volume Scan – Rear Position**

Scenario No.5

①+④+⑤

Licensed Band + WLAN 5 GHz MIMO = 0.949 W/kg

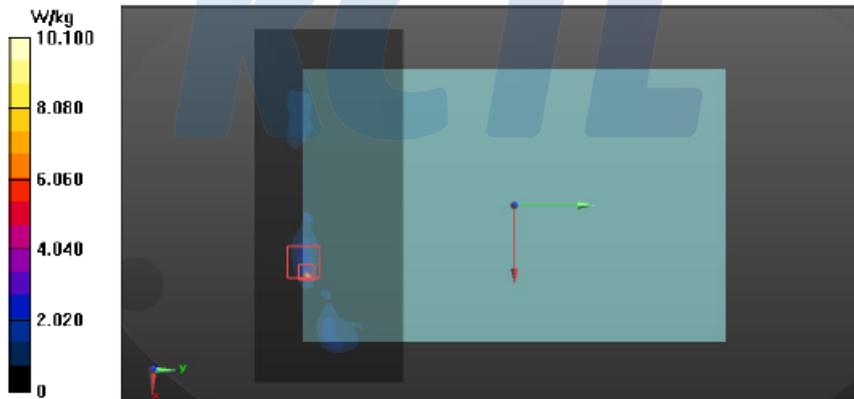
**Multi-Band Average SAR****Multi-Band Configurations:**DASY Configuration for Configuration/GSM1900\_GPRS 2Tx\_CH661\_Rear\_0 mm  
Grip Sensor On\_VS/Volume Scan:DASY Configuration for Configuration/802.11 ac\_VHT80\_WLAN2\_CH155\_Rear\_0  
mm Sensor On/Volume Scan:DASY Configuration for Configuration/802.11 ac\_VHT80\_WLAN1\_CH122\_Rear\_0  
mm Sensor On/Volume Scan:**Multi Band Result:**SAR(1 g) = 0.949 W/kg; SAR(10 g) = 0.430 W/kg  
Maximum value of SAR (interpolated) = 9.61 W/kg

**GSM 1900 Volume Scan – Rear Position**

Scenario No.6

①+②+⑥

Licensed Band + WLAN 2.4 GHz Ant.2 + Bluetooth Ant.1 = 0.955 W/kg

**Multi-Band Average SAR****Multi-Band Configurations:**DASY Configuration for Configuration/GSM1900\_GPRS 2Tx\_CH661\_Rear\_0 mm  
Grip Sensor On\_VS/Volume Scan:DASY Configuration for Configuration/802.11 b\_WLAN2\_CH1\_Rear\_0 mm Sensor On  
VS/Volume Scan:DASY Configuration for Configuration/Bluetooth\_GFSK\_DH5\_Ant.1\_CH0\_Rear\_0  
mm Sensor On/Volume Scan:**Multi Band Result:**SAR(1 g) = 0.955 W/kg; SAR(10 g) = 0.357 W/kg  
Maximum value of SAR (interpolated) = 10.1 W/kg

**GSM 1900 Volume Scan – Rear Position**

Scenario No.7

①+④+⑤+⑥

Licensed Band + WLAN 5 GHz MIMO + Bluetooth Ant.1 = 1.06 W/kg

## Multi-Band Average SAR

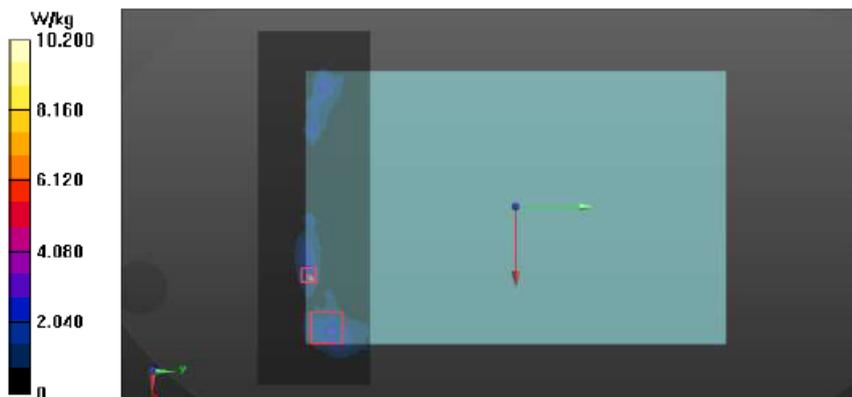
## Multi-Band Configurations:

DASY Configuration for Configuration/GSM1900\_GPRS 2Tx\_CH661\_Rear\_0 mm  
Grip Sensor On\_VS/Volume Scan:DASY Configuration for Configuration/802.11 ac\_VHT80\_WLAN2\_CH155\_Rear\_0  
mm Sensor On/Volume Scan:DASY Configuration for Configuration/802.11 ac\_VHT80\_WLAN1\_CH122\_Rear\_0  
mm Sensor On/Volume Scan:DASY Configuration for Configuration/Bluetooth\_GFSK\_DH5\_Ant.1\_CH0\_Rear\_0  
mm Sensor On/Volume Scan:

## Multi Band Result:

SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.480 W/kg

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

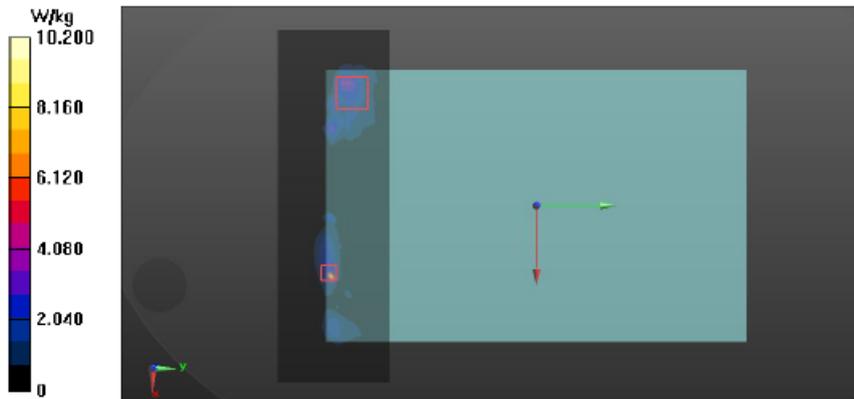


**GSM 1900 Volume Scan – Rear Position**

Scenario No.8

①+④+⑤+⑦

Licensed Band + WLAN 5 GHz MIMO + Bluetooth Ant.2 = 1.06 W/kg

**Multi-Band Average SAR****Multi-Band Configurations:**DASY Configuration for Configuration/GSM1900\_GPRS 2Tx\_CH661\_Rear\_0 mm  
Grip Sensor On\_VS/Volume Scan:DASY Configuration for Configuration/802.11 ac\_VHT80\_WLAN2\_CH155\_Rear\_0  
mm Sensor On/Volume Scan:DASY Configuration for Configuration/802.11 ac\_VHT80\_WLAN1\_CH122\_Rear\_0  
mm Sensor On/Volume Scan:DASY Configuration for Configuration/Bluetooth\_GFSK\_DH5\_Ant.2\_CH39\_Rear\_0  
mm Sensor On/Volume Scan:**Multi Band Result:**SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.492 W/kg  
Maximum value of SAR (interpolated) = 10.2 W/kg

**GSM 1900 Volume Scan – Rear Position**

Scenario No.9

①+②+④+⑤+⑥

Licensed Band+ WLAN 2.4 GHz Ant.2 + WLAN 5 GHz MIMO + Bluetooth Ant.1 = 1.07 W/kg

## Multi-Band Average SAR

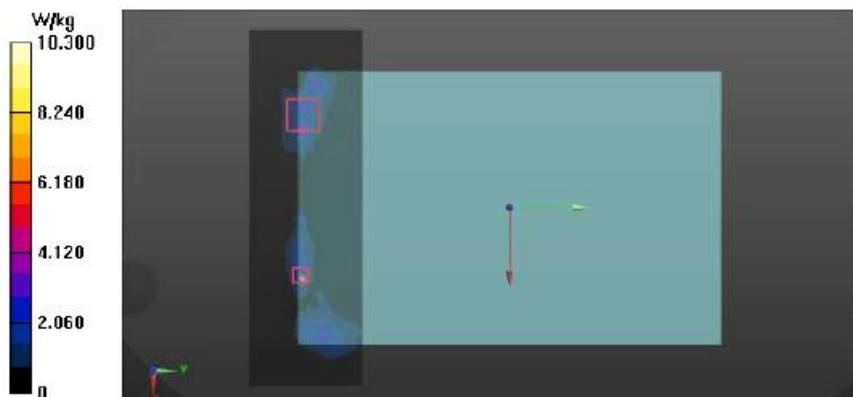
## Multi-Band Configurations:

DASY Configuration for Configuration/GSM1900\_GPRS 2Tx\_CH661\_Rear\_0 mm  
Grip Sensor On\_VS/Volume Scan:DASY Configuration for Configuration/802.11 ac\_VHT80\_WLAN2\_CH155\_Rear\_0  
mm Sensor On/Volume Scan:DASY Configuration for Configuration/802.11 b\_WLAN2\_CH1\_Rear\_0 mm Sensor  
On VS/Volume Scan:DASY Configuration for Configuration/802.11 ac\_VHT80\_WLAN1\_CH122\_Rear\_0  
mm Sensor On/Volume Scan:DASY Configuration for Configuration/Bluetooth\_GFSK\_DH5\_Ant.1\_CH0\_Rear\_0  
mm Sensor On/Volume Scan:

## Multi Band Result:

SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.553 W/kg

Maximum value of SAR (interpolated) = 10.3 W/kg



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## GSM 1900 Volume Scan – Rear Position

Scenario No.10

①+③+④+⑤

Licensed Band+ WLAN 2.4 GHz MIMO + WLAN 5 GHz MIMO = 1.29 W/kg

### Multi-Band Average SAR

#### Multi-Band Configurations:

DASY Configuration for Configuration/802.11 b\_MIMO\_CH11\_Rear\_0 mm Sensor On VS/Volume Scan:

DASY Configuration for Configuration/802.11 ac\_VHT80\_WLAN2\_CH155\_Rear\_0 mm Sensor On/Volume Scan:

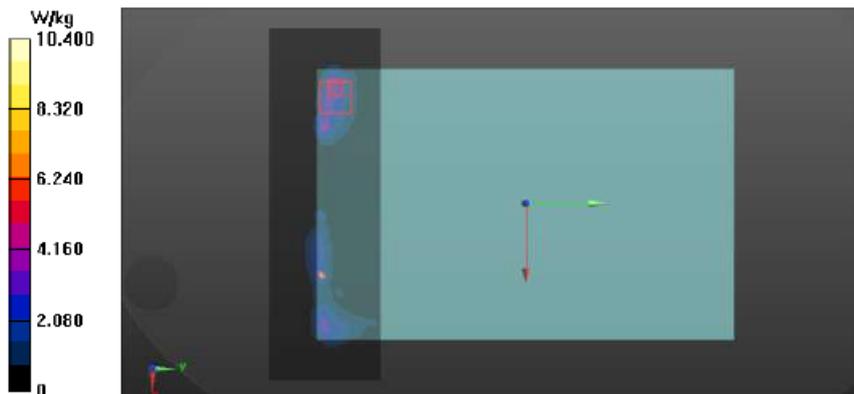
DASY Configuration for Configuration/GSM1900\_GPRS 2Tx\_CH661\_Rear\_0 mm Sensor On\_VS/Volume Scan:

DASY Configuration for Configuration/802.11 ac\_VHT80\_WLAN1\_CH122\_Rear\_0 mm Sensor On/Volume Scan:

#### Multi Band Result:

SAR(1 g) = 1.29 W/kg; SAR(10 g) = 0.656 W/kg

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



**LTE Band 5 Volume Scan – Top Position**

Scenario No.7

①+④+⑤+⑥

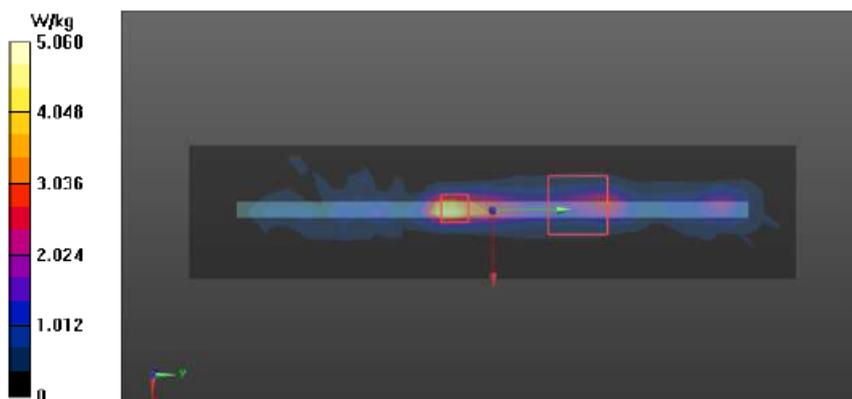
Licensed Band + WLAN 5 GHz MIMO + Bluetooth Ant.1 = 0.958 W/kg

## Multi-Band Average SAR

## Multi-Band Configurations:

DASY Configuration for Configuration 3/LTE Band 5\_QPSK\_10  
MHz\_50RB\_0offset\_CH20525\_Top\_0 mm Grip Sensor On\_VS/Volume Scan:DASY Configuration for Configuration 5/802.11 ac\_VHT80\_WLAN1\_CH122\_Top\_0  
mm Sensor On\_VS/Volume Scan:DASY Configuration for Configuration 5/Bluetooth\_GFSK\_DH5\_Ant.1\_CH0\_Top\_0  
mm Sensor On/Volume Scan:DASY Configuration for Configuration 5/802.11 ac\_VHT80\_WLAN2\_CH155\_Top\_0  
mm Sensor On\_VS 2/Volume Scan:

## Multi Band Result:

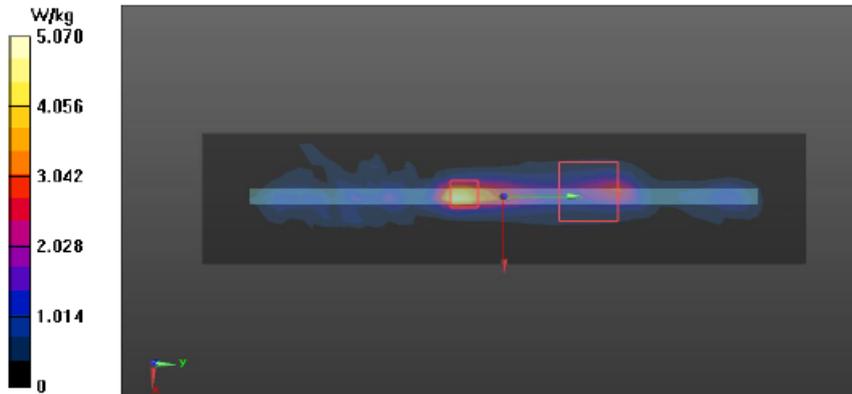
SAR(1 g) = 0.958 W/kg; SAR(10 g) = 0.394 W/kg  
Maximum value of SAR (interpolated) = 5.06 W/kg

**LTE Band 5 Volume Scan – Top Position**

Scenario No.8

①+④+⑤+⑦

Licensed Band + WLAN 5 GHz MIMO + Bluetooth Ant.2 = 0.958 W/kg

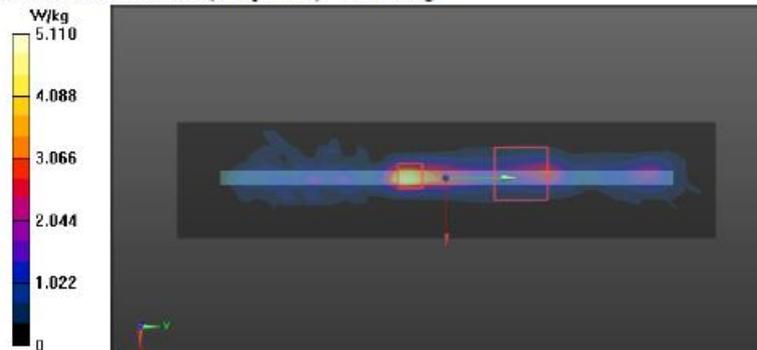
**Multi-Band Average SAR****Multi-Band Configurations:**DASY Configuration for Configuration 3/LTE Band 5\_QPSK\_10  
MHz\_50RB\_offset\_CH20525\_Top\_0 mm Grip Sensor On\_VS/Volume Scan:DASY Configuration for Configuration 5/802.11 ac\_VHT80\_WLAN1\_CH122\_Top\_0  
mm Sensor On\_VS/Volume Scan:DASY Configuration for Configuration 5/802.11 ac\_VHT80\_WLAN2\_CH155\_Top\_0  
mm Sensor On\_VS 2/Volume Scan:DASY Configuration for Configuration 5/Bluetooth\_GFSK\_DH5\_Ant.2\_CH39\_Top\_0  
mm Sensor On/Volume Scan:**Multi Band Result:**SAR(1 g) = 0.958 W/kg; SAR(10 g) = 0.394 W/kg  
Maximum value of SAR (interpolated) = 5.07 W/kg

## LTE Band 5 Volume Scan – Top Position

Scenario No.9

①+②+④+⑤+⑥

Licensed Band+ WLAN 2.4 GHz Ant.2 + WLAN 5 GHz MIMO + Bluetooth Ant.1 = 0.968 W/kg

**Multi-Band Average SAR****Multi-Band Configurations:**DASY Configuration for Configuration 3/LTE Band 5\_QPSK\_10  
MHz\_50RB\_offset\_CH20525\_Top\_0 mm Grip Sensor On\_VS/Volume Scan:DASY Configuration for Configuration 5/802.11 ac\_VHT80\_WLAN1\_CH122\_Top\_0  
mm Sensor On\_VS/Volume Scan:DASY Configuration for Configuration 5/Bluetooth\_GFSK\_DH5\_Ant.1\_CH0\_Top\_0  
mm Sensor On/Volume Scan:DASY Configuration for Configuration 5/802.11 ac\_VHT80\_WLAN2\_CH155\_Top\_0  
mm Sensor On\_VS 2/Volume Scan:DASY Configuration for Configuration 5/802.11\_b\_WLAN2\_CH1\_Top\_0 mm Sensor  
On VS/Volume Scan:**Multi Band Result:**SAR(1 g) = 0.968 W/kg; SAR(10 g) = 0.394 W/kg  
Maximum value of SAR (interpolated) = 5.11 W/kg

**LTE Band 5 Volume Scan – Top Position**

Scenario No.10

①+③+④+⑤

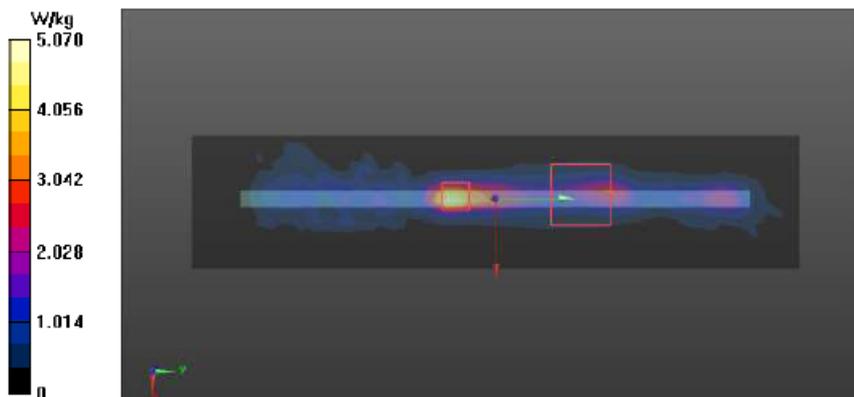
Licensed Band+ WLAN 2.4 GHz MIMO + WLAN 5 GHz MIMO = 0.965 W/kg

## Multi-Band Average SAR

## Multi-Band Configurations:

DASY Configuration for Configuration 3/LTE Band 5\_QPSK\_10  
MHz\_50RB\_Offset\_CH20525\_Top\_0 mm Grip Sensor On\_VS/Volume Scan:DASY Configuration for Configuration 5/802.11\_b\_MIMO\_CH11\_Top\_0 mm  
Sensor On VS/Volume Scan:DASY Configuration for Configuration 5/802.11 ac\_VHT80\_WLAN1\_CH122\_Top\_0  
mm Sensor On\_VS/Volume Scan:DASY Configuration for Configuration 5/802.11 ac\_VHT80\_WLAN2\_CH155\_Top\_0  
mm Sensor On\_VS 2/Volume Scan:

## Multi Band Result:

SAR(1 g) = 0.965 W/kg; SAR(10 g) = 0.395 W/kg  
Maximum value of SAR (interpolated) = 5.07 W/kg

## 14. SAR Measurement Variability

Per FCC KDB Publication 865664 D01v01r04, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:

- 1) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg.
- 2) **When the original highest measured SAR is  $\geq 0.80$  W/kg, the measurement was repeated once.**
- 3) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was  $\geq 1.45$  W/kg (~ 10% from the 1-g SAR limit).
- 4) A third repeated measurement was performed only if the original, first or second repeated measurement was  $\geq 1.5$  W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

Band	Mode	Ant.	Frequency (MHz)	EUT Position	Separation Distance (mm)	Measured 1 g SAR (W/kg)	Repeated 1 g SAR (W/kg)	Ratio
GSM 1900 Band	GPRS 2Tx	-	1 880.0	Rear	0	0.853	0.893	1.05
LTE Band 2	QPSK 20M 50RB 24Offset	-	1 900.0	Top	0	0.808	0.811	1.00
LTE Band 41	QPSK 20M 50RB 24Offset	-	2 593.0	Rear	0	0.649	0.620	1.05
U-NII-2C	802.11n(HT40)	Ant.1	5 670.0	Rear	7	0.908	0.937	1.03
U-NII-2C	802.11n(HT40)	Ant.2	5 670.0	Left	4	0.999	0.853	1.17
U-NII-3	802.11n(HT40)	Ant.1	5 755.0	Right	7	0.848	0.810	1.05

**KCTL Inc.**

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**KCTL****15. Measurement Uncertainty**

Per KDB 865664 D01 SAR measurement 100MHz to 6GHz, when the highest measured 1-g SAR within a frequency band is  $< 1.5$  W/kg and the measured 10-g SAR within a frequency band is  $< 3.75$  W/kg. The expanded SAR measurement uncertainty must be  $\leq 30\%$ , for a confidence interval of  $k = 2$ . If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Standard 1528-2013 is not required in SAR reports submitted for equipment approval. For this device, the highest measured 1-g SAR is less 1.5W/kg and highest measured 10-g SAR is less 3.75W/kg. Therefore, the measurement uncertainty table is not required in this report.

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## 16. Test Equipment Information

Test Platform	SPEAG DASY5 System			
Version	DASY52: 52.10.4.1527 / SEMCAD: 14.6.14 (7483)			
Location	KCTL Inc, 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Korea			
Manufacture	SPEAG			
Hardware Reference				
Equipment	Model	Serial Number	Date of Calibration	Due date of next Calibration
Shield Room	-	8F - 1	-	-
Shield Room	-	8F - 2	-	-
DASY5 Robot	TX90XL speag	F07/554JA1/A/01	-	-
DASY5 Robot	TX90XL	F12/5L7FA1/A/01	-	-
Phantom	2mm Oval Phantom ELI5	1220	-	-
Phantom	2mm Oval Phantom ELI5	1173	-	-
Phantom	2mm Oval Phantom ELI5	1178	-	-
Mounting Device	Laptop Holder	-	-	-
DAE	DAE4	666	2020-01-24	2021-01-24
DAE	DAE4	1342	2019-05-23	2020-05-23
DAE	DAE4	1586	2020-04-22	2021-04-22
Probe	EX3DV4	3928	2020-01-30	2021-01-30
Probe	EX3DV4	3865	2019-08-28	2020-08-28
ESG Vector Signal Generator	E4438C	MY42080486	2019-05-13	2020-05-13
			2020-05-11	2021-05-11*
Dual Power Meter	E4419B	GB43312301	2019-05-13	2020-05-13
			2020-05-12	2021-05-12*
Power Sensor	8481H	3318A 19379	2019-05-13	2020-05-13
			2020-05-12	2021-05-12*
Power Sensor	8481H	3318A 19377	2019-05-13	2020-05-13
			2020-05-12	2021-05-12*
Attenuator	8491B 3dB	17387	2019-05-13	2020-05-13
			2020-05-12	2021-05-12*
Attenuator	8491B 10dB	29425	2019-05-13	2020-05-13
			2020-05-12	2021-05-12*
Attenuator	8491B-6dB	MY39270294	2019-05-13	2020-05-13
			2020-05-12	2021-05-12*
Power Amplifier	GRF5039	1062	2020-05-12	2021-05-12
Power Amplifier	2055-BBS3Q7E9I	1005D/C0521	2020-03-12	2021-03-12
Dual Directional Coupler	778D	16059	2019-05-13	2020-05-13
			2020-05-12	2021-05-12*

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Equipment	Model	Serial Number	Date of Calibration	Due date of next Calibration
Dual Directional Coupler	772D	2839A00719	2019-05-13	2020-05-13
			2020-05-12	2021-05-12*
Low Pass Filter	LA-15N	36543	2020-05-12	2021-05-12
Low Pass Filter	LA-30N	40058	2019-05-13	2020-05-13
			2020-05-12	2021-05-12*
Low Pass Filter	LA-60N	40059	2020-05-12	2021-05-12
Dipole Validation Kits	D750V3	1183	2018-09-03	2020-09-03
Dipole Validation Kits	D850V2	1006	2020-04-21	2022-04-21
Dipole Validation Kits	D1750V2	1072	2020-04-20	2022-04-20
Dipole Validation Kits	D1900V2	5d160	2020-04-22	2022-04-22
Dipole Validation Kits	D2450V2	895	2018-07-24	2020-07-24
Dipole Validation Kits	D2600V2	1050	2018-07-26	2020-07-26
Dipole Validation Kits	D5GHzV2	1293	2019-07-04	2021-07-04
Network Analyzer	E5071B	MY42403524	2020-02-27	2021-02-27
Dielectric Assessment Kit	DAK-3.5	1078	2019-05-22	2020-05-22
Dielectric Assessment Kit	DAK-3.5	1046	2020-04-28	2021-04-28
Humidity/Temp.	MHB-382SD	73871	2020-05-14	2021-05-14
			2019-05-16	2020-05-16
Humidity/Temp.	MHB-382SD	23107	2020-05-14	2021-05-14*
			2019-05-16	2020-05-16
Wideband Radio Communication Tester	CMW500	168683	2020-04-06	2021-04-06
Wideband Radio Communication Tester	CMW500	132120	2020-05-11	2021-05-11
Radio Communication Analyzer	MT8821C	6201502996	2019-09-16	2020-09-16
Radio Communication Analyzer	MT8821C	6261991084	2020-05-14	2021-05-14

\* Tests related to this equipment were progressed after the calibration was completed.

## 17. Test System Verification Results

Date: 2020-06-21

Test Laboratory: KCTL Inc.

File Name: [750 MHz Verification Input Power 250 mW 2020-06-21.da52:0](#)**DUT: Dipole 750 MHz D750V3, Type: D750V3, Serial: D750V3 - SN:1183**Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.867$  S/m;  $\epsilon_r = 43.128$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.45, 10.45, 10.45) @ 750 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/750 MHz Verification Input Power 250 mW 2020-06-21/Area Scan (7x13x1):**

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.50 W/kg

**Configuration/750 MHz Verification Input Power 250 mW 2020-06-21/Zoom Scan****(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 56.71 V/m; Power Drift = 0.04 dB

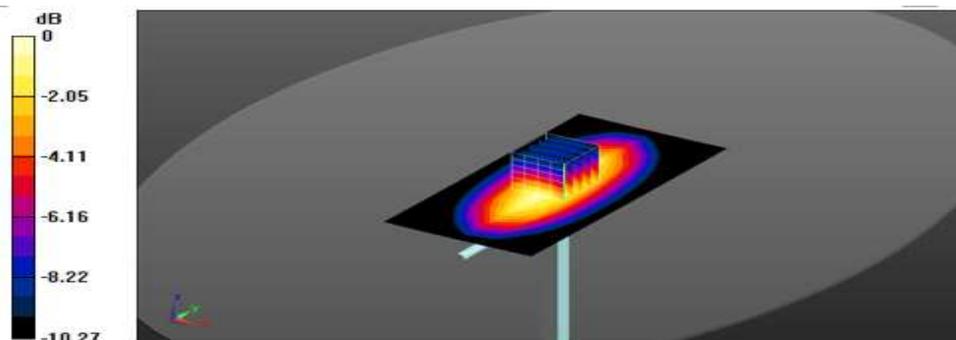
Peak SAR (extrapolated) = 2.84 W/kg

**SAR(1 g) = 1.92 W/kg; SAR(10 g) = 1.27 W/kg**

Smallest distance from peaks to all points 3 dB below = 22.6 mm

Ratio of SAR at M2 to SAR at M1 = 66.9%

Maximum value of SAR (measured) = 2.54 W/kg



0 dB = 2.54 W/kg = 4.05 dBW/kg

Date: 2020-06-22

Test Laboratory: KCTL Inc.

File Name: [750 MHz Verification Input Power 250 mW 2020-06-22.da52:0](#)**DUT: Dipole 750 MHz D750V3, Type: D750V3, Serial: D750V3 - SN:1183**Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.9$  S/m;  $\epsilon_r = 42.515$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.45, 10.45, 10.45) @ 750 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/750 MHz Verification Input Power 250 mW 2020-06-22/Area Scan (7x13x1):**

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.73 W/kg

**Configuration/750 MHz Verification Input Power 250 mW 2020-06-22/Zoom Scan****(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 58.33 V/m; Power Drift = -0.06 dB

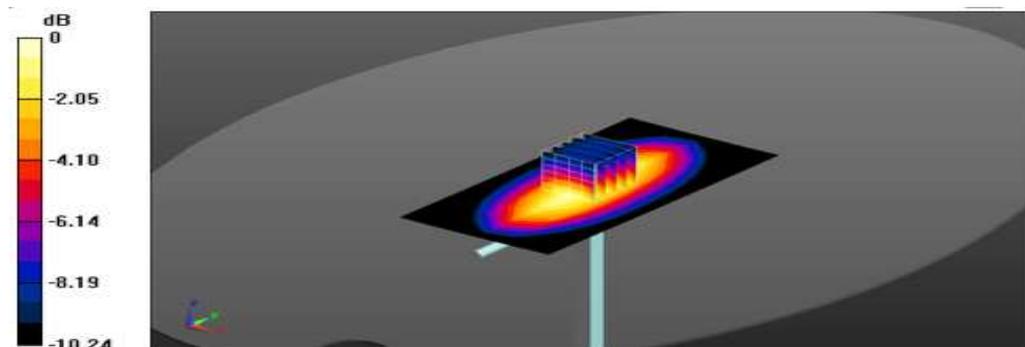
Peak SAR (extrapolated) = 3.06 W/kg

**SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.39 W/kg**

Smallest distance from peaks to all points 3 dB below = 21.5 mm

Ratio of SAR at M2 to SAR at M1 = 67.2%

Maximum value of SAR (measured) = 2.75 W/kg



0 dB = 2.75 W/kg = 4.39 dBW/kg

Date: 2020-06-17

Test Laboratory: KCTL Inc.

File Name: [850 MHz Verification Input Power 250 mW 2020-06-17.da52:0](#)**DUT: Dipole 850 MHz D850V2, Type: D850V2, Serial: D850V2 - SN:1006**Communication System: UID 0, CW (0); Frequency: 850 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 850$  MHz;  $\sigma = 0.908$  S/m;  $\epsilon_r = 40.497$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 850 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**System Performance Check/850 MHz Verification Input Power 250 mW 2020-06-17/Area Scan****(7x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 3.29 W/kg

**System Performance Check/850 MHz Verification Input Power 250 mW 2020-06-17/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 62.70 V/m; Power Drift = 0.11 dB

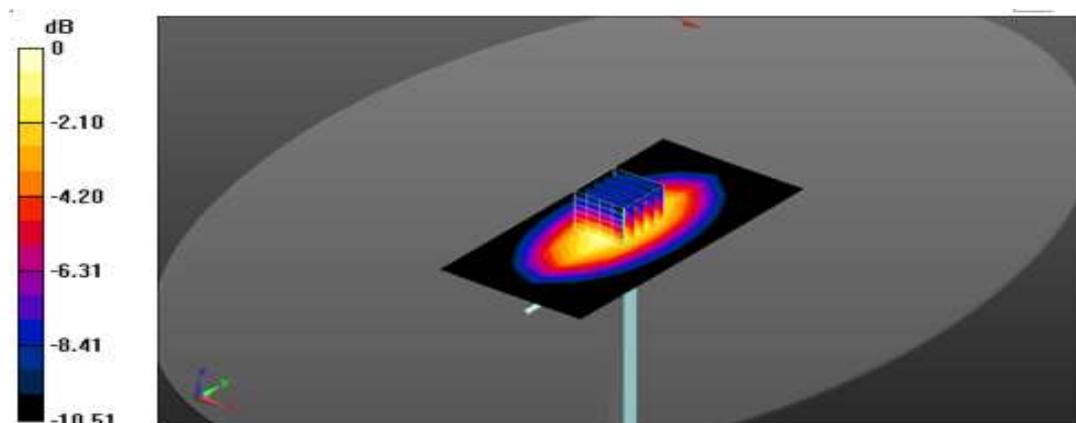
Peak SAR (extrapolated) = 3.80 W/kg

**SAR(1 g) = 2.54 W/kg; SAR(10 g) = 1.67 W/kg**

Smallest distance from peaks to all points 3 dB below = 20.5 mm

Ratio of SAR at M2 to SAR at M1 = 66.5%

Maximum value of SAR (measured) = 3.38 W/kg



0 dB = 3.38 W/kg = 5.29 dBW/kg

Date: 2020-06-18

Test Laboratory: KCTL Inc.

File Name: [850 MHz Verification Input Power 250 mW 2020-06-18.da52:0](#)**DUT: Dipole 850 MHz D850V2, Type: D850V2, Serial: D850V2 - SN:1006**Communication System: UID 0, CW (0); Frequency: 850 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 850$  MHz;  $\sigma = 0.901$  S/m;  $\epsilon_r = 40.514$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 850 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**System Performance Check/850 MHz Verification Input Power 250 mW 2020-06-18/Area Scan****(7x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 3.27 W/kg

**System Performance Check/850 MHz Verification Input Power 250 mW 2020-06-18/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 63.05 V/m; Power Drift = 0.07 dB

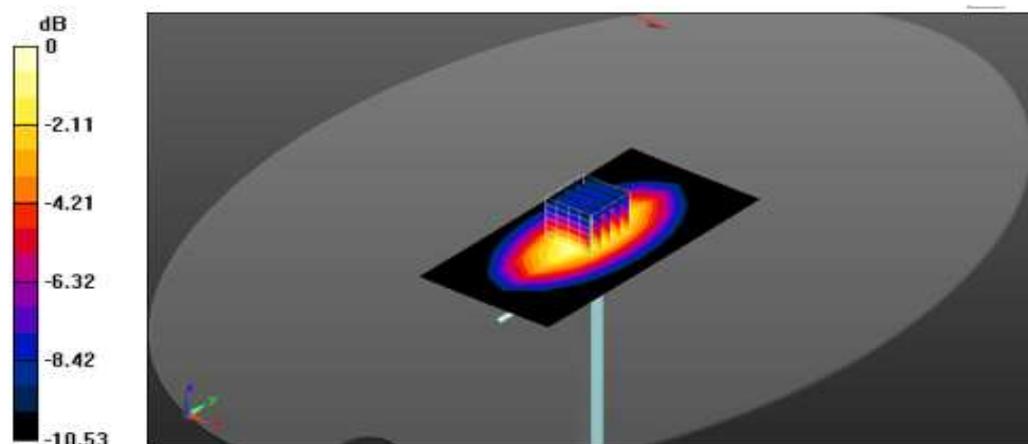
Peak SAR (extrapolated) = 3.77 W/kg

**SAR(1 g) = 2.52 W/kg; SAR(10 g) = 1.66 W/kg**

Smallest distance from peaks to all points 3 dB below = 20.5 mm

Ratio of SAR at M2 to SAR at M1 = 66.3%

Maximum value of SAR (measured) = 3.36 W/kg



0 dB = 3.36 W/kg = 5.26 dBW/kg

Date: 2020-06-19

Test Laboratory: KCTL Inc.

File Name: [850 MHz Verification Input Power 250 mW 2020-06-19.da52:0](#)**DUT: Dipole 850 MHz D850V2, Type: D850V2, Serial: D850V2 - SN:1006**Communication System: UID 0, CW (0); Frequency: 850 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 850$  MHz;  $\sigma = 0.909$  S/m;  $\epsilon_r = 40.713$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 850 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**System Performance Check/850 MHz Verification Input Power 250 mW 2020-06-19/Area Scan****(7x13x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 3.29 W/kg

**System Performance Check/850 MHz Verification Input Power 250 mW 2020-06-19/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 62.97 V/m; Power Drift = 0.07 dB

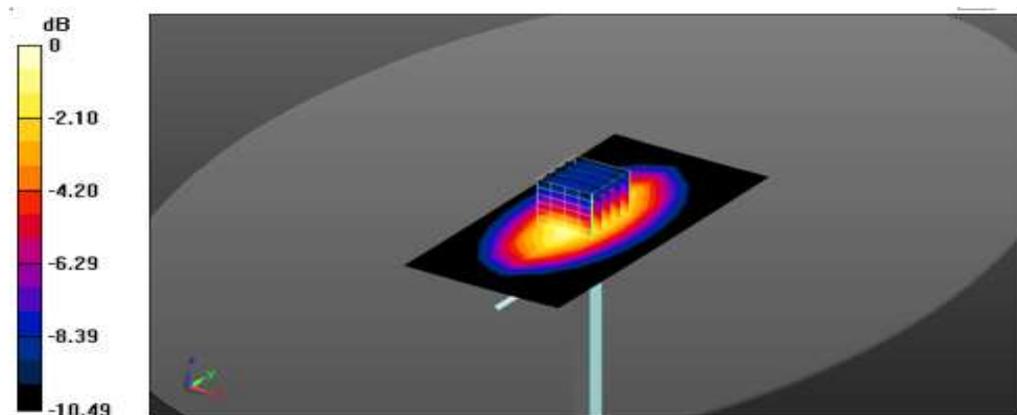
Peak SAR (extrapolated) = 3.79 W/kg

**SAR(1 g) = 2.54 W/kg; SAR(10 g) = 1.68 W/kg**

Smallest distance from peaks to all points 3 dB below = 20.5 mm

Ratio of SAR at M2 to SAR at M1 = 66.7%

Maximum value of SAR (measured) = 3.38 W/kg



0 dB = 3.38 W/kg = 5.29 dBW/kg

Date: 2020-06-20

Test Laboratory: KCTL Inc.

File Name: [850 MHz Verification Input Power 250 mW 2020-06-20.da52:0](#)**DUT: Dipole 850 MHz D850V2, Type: D850V2, Serial: D850V2 - SN:1006**Communication System: UID 0, CW (0); Frequency: 850 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 850$  MHz;  $\sigma = 0.921$  S/m;  $\epsilon_r = 41.448$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 850 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**System Performance Check/850 MHz Verification Input Power 250 mW 2020-06-20/Area Scan**

(7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 3.18 W/kg

**System Performance Check/850 MHz Verification Input Power 250 mW 2020-06-20/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm**

Reference Value = 61.33 V/m; Power Drift = 0.06 dB

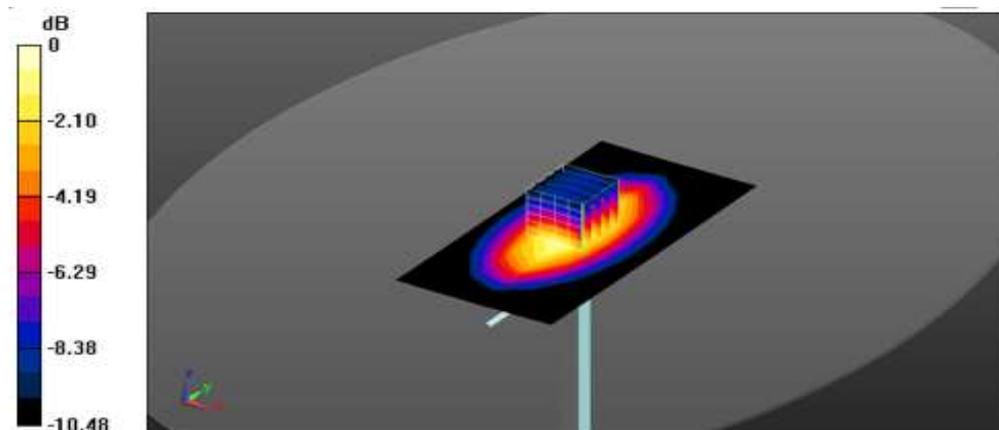
Peak SAR (extrapolated) = 3.62 W/kg

**SAR(1 g) = 2.44 W/kg; SAR(10 g) = 1.61 W/kg**

Smallest distance from peaks to all points 3 dB below = 21.5 mm

Ratio of SAR at M2 to SAR at M1 = 66.9%

Maximum value of SAR (measured) = 3.24 W/kg



0 dB = 3.24 W/kg = 5.11 dBW/kg

Date: 2020-06-08

Test Laboratory: KCTL Inc.

File Name: [1750 MHz Verification Input Power 250 mW 2020-06-08.da52:0](#)**DUT: Dipole 1750 MHz D1750V2, Type: D1750V2, Serial: D1750V2 - SN:1072**Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.352$  S/m;  $\epsilon_r = 39.139$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(9.01, 9.01, 9.01) @ 1750 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/1750 MHz Verification Input Power 250 mW 2020-06-08/Area Scan (8x11x1):**

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.19 W/kg

**Configuration/1750 MHz Verification Input Power 250 mW 2020-06-08/Zoom Scan****(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 104.7 V/m; Power Drift = -0.02 dB

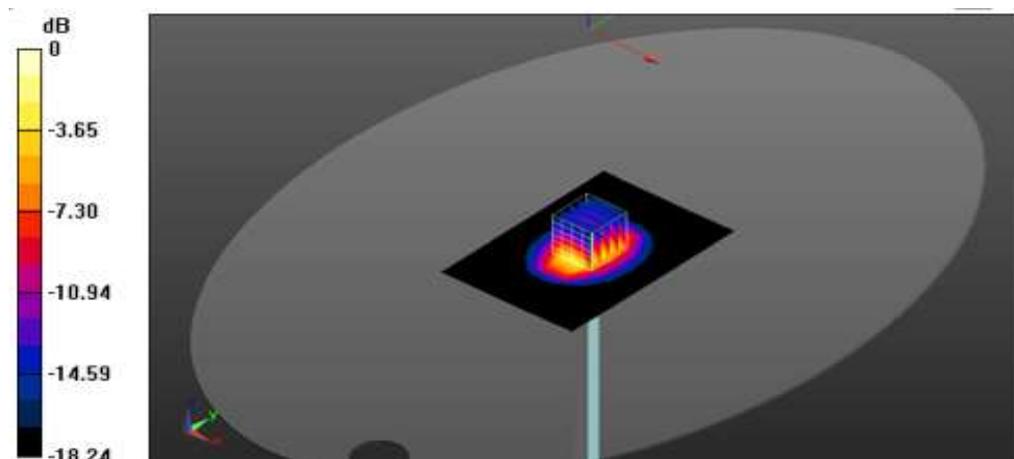
Peak SAR (extrapolated) = 16.5 W/kg

**SAR(1 g) = 8.75 W/kg; SAR(10 g) = 4.56 W/kg**

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 52.1%

Maximum value of SAR (measured) = 13.8 W/kg



0 dB = 13.8 W/kg = 11.40 dBW/kg

Date: 2020-06-10

Test Laboratory: KCTL Inc.

File Name: [1750 MHz Verification Input Power 250 mW 2020-06-10.da52:0](#)**DUT: Dipole 1750 MHz D1750V2, Type: D1750V2, Serial: D1750V2 - SN:1072**Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.386$  S/m;  $\epsilon_r = 39.324$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(9.01, 9.01, 9.01) @ 1750 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/1750 MHz Verification Input Power 250 mW 2020-06-10/Area Scan (8x11x1):**

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 10.3 W/kg

**Configuration/1750 MHz Verification Input Power 250 mW 2020-06-10/Zoom Scan****(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 105.5 V/m; Power Drift = -0.01 dB

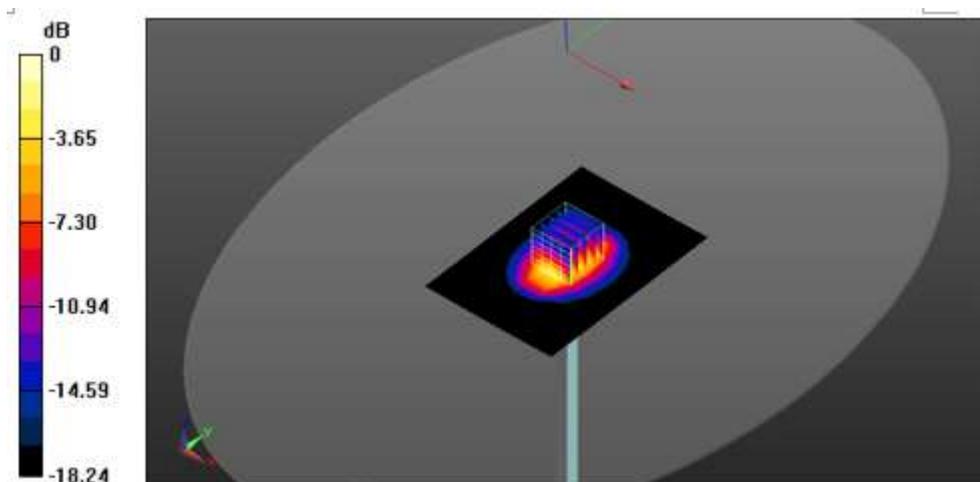
Peak SAR (extrapolated) = 17.5 W/kg

**SAR(1 g) = 9.24 W/kg; SAR(10 g) = 4.8 W/kg**

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 52.1%

Maximum value of SAR (measured) = 14.6 W/kg



0 dB = 14.6 W/kg = 11.64 dBW/kg

Date: 2020-05-22

Test Laboratory: KCTL Inc.

File Name: [1900 MHz Verification Input Power 250 mW 2020-05-22.da52:0](#)**DUT: Dipole 1900 MHz D1900V2, Type: D1900V2, Serial: D1900V2 - SN:5d160**Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.428$  S/m;  $\epsilon_r = 39.651$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1900 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/1900 MHz Verification Input Power 250 mW 2020-05-22/Area Scan (7x11x1):**

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 14.3 W/kg

**Configuration/1900 MHz Verification Input Power 250 mW 2020-05-22/Zoom Scan****(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 108.1 V/m; Power Drift = 0.01 dB

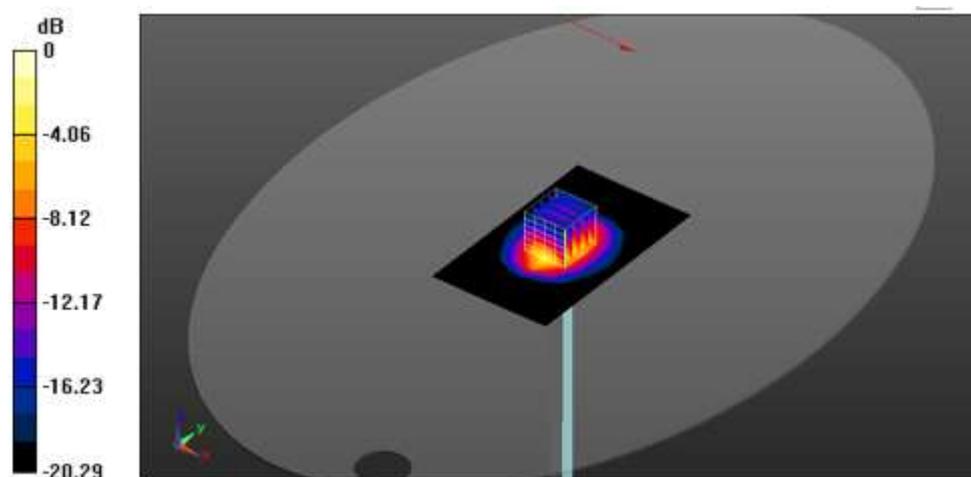
Peak SAR (extrapolated) = 19.5 W/kg

**SAR(1 g) = 9.72 W/kg; SAR(10 g) = 4.87 W/kg**

Smallest distance from peaks to all points 3 dB below = 10.1 mm

Ratio of SAR at M2 to SAR at M1 = 49.1%

Maximum value of SAR (measured) = 15.8 W/kg



0 dB = 15.8 W/kg = 11.99 dBW/kg

Date: 2020-06-06

Test Laboratory: KCTL Inc.

File Name: [1900 MHz Verification Input Power 250 mW 2020-06-06.da52:0](#)**DUT: Dipole 1900 MHz D1900V2, Type: D1900V2, Serial: D1900V2 - SN:5d160**Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.417$  S/m;  $\epsilon_r = 39.26$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1900 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/1900 MHz Verification Input Power 250 mW 2020-06-06/Area Scan (7x11x1):**

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 16.9 W/kg

**Configuration/1900 MHz Verification Input Power 250 mW 2020-06-06/Zoom Scan****(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 111.6 V/m; Power Drift = 0.15 dB

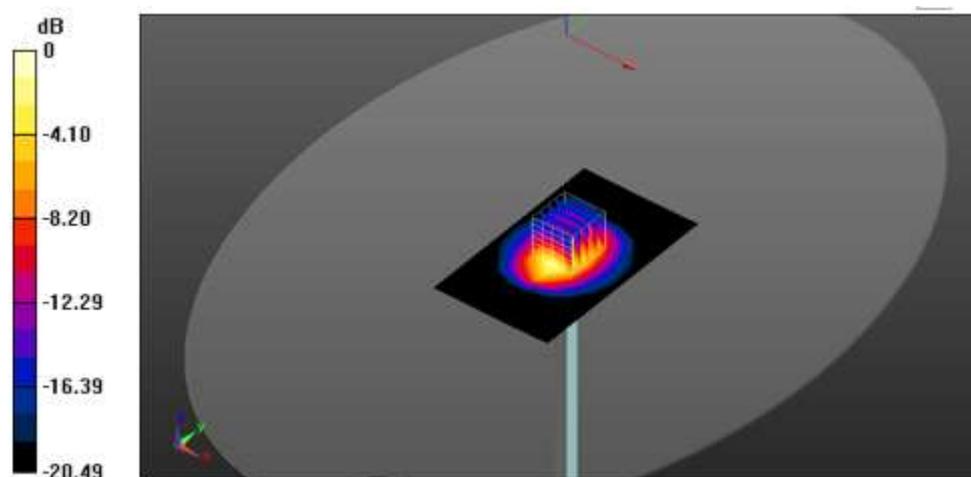
Peak SAR (extrapolated) = 19.2 W/kg

**SAR(1 g) = 9.6 W/kg; SAR(10 g) = 4.83 W/kg**

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 49.2%

Maximum value of SAR (measured) = 15.4 W/kg



0 dB = 15.4 W/kg = 11.88 dBW/kg

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Date: 2020-06-07

Test Laboratory: KCTL Inc.

File Name: [1900 MHz Verification Input Power 250 mW 2020-06-07.da52:0](#)**DUT: Dipole 1900 MHz D1900V2, Type: D1900V2, Serial: D1900V2 - SN:5d160**Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.403$  S/m;  $\epsilon_r = 39.424$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1900 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/1900 MHz Verification Input Power 250 mW 2020-06-07/Area Scan (7x11x1):**

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 16.4 W/kg

**Configuration/1900 MHz Verification Input Power 250 mW 2020-06-07/Zoom Scan****(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 111.5 V/m; Power Drift = 0.04 dB

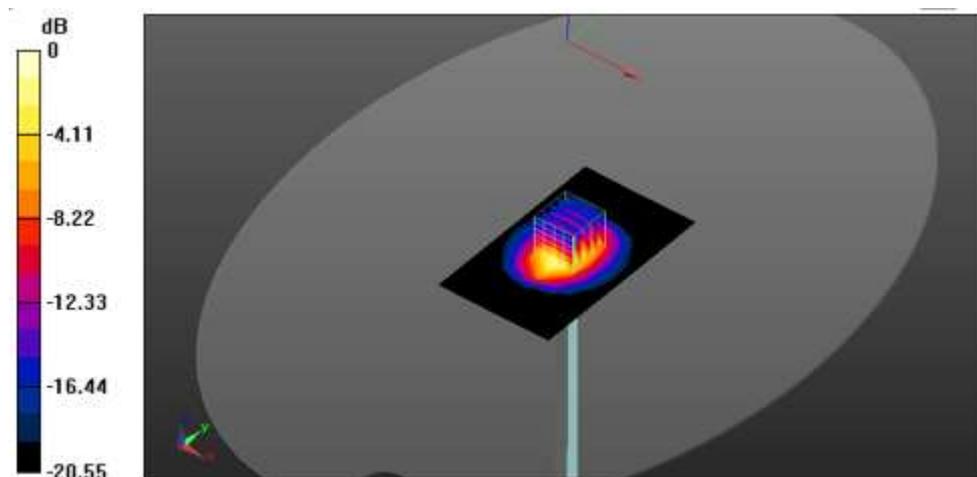
Peak SAR (extrapolated) = 20.5 W/kg

**SAR(1 g) = 10.2 W/kg; SAR(10 g) = 5.11 W/kg**

Smallest distance from peaks to all points 3 dB below = 10.7 mm

Ratio of SAR at M2 to SAR at M1 = 49.1%

Maximum value of SAR (measured) = 16.4 W/kg



0 dB = 16.4 W/kg = 12.15 dBW/kg

Date: 2020-06-09

Test Laboratory: KCTL Inc.

File Name: [1900 MHz Verification Input Power 250 mW 2020-06-09.da52:0](#)**DUT: Dipole 1900 MHz D1900V2, Type: D1900V2, Serial: D1900V2 - SN:5d160**Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.426$  S/m;  $\epsilon_r = 39.283$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1900 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/1900 MHz Verification Input Power 250 mW 2020-06-09/Area Scan (7x11x1):**

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 16.6 W/kg

**Configuration/1900 MHz Verification Input Power 250 mW 2020-06-09/Zoom Scan****(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 109.6 V/m; Power Drift = 0.18 dB

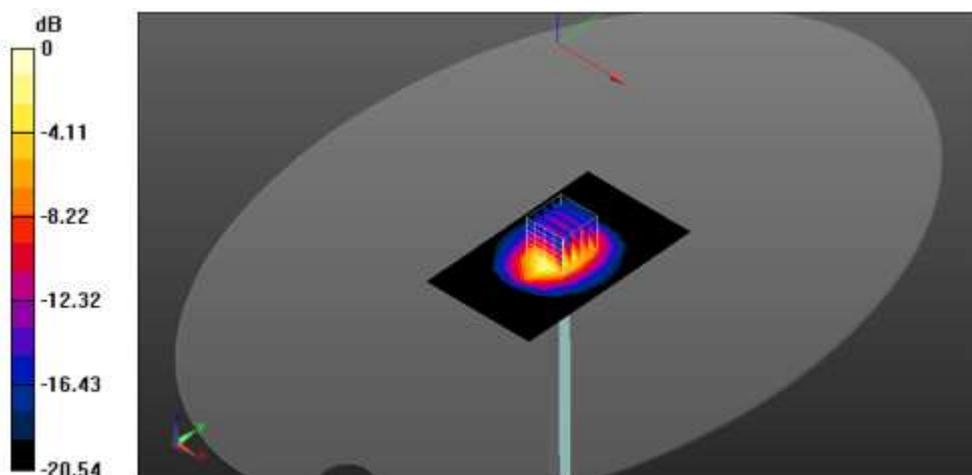
Peak SAR (extrapolated) = 20.8 W/kg

**SAR(1 g) = 10.4 W/kg; SAR(10 g) = 5.22 W/kg**

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 49.2%

Maximum value of SAR (measured) = 16.6 W/kg



0 dB = 16.6 W/kg = 12.20 dBW/kg

Date: 2020-06-11

Test Laboratory: KCTL Inc.

File Name: [1900 MHz Verification Input Power 250 mW 2020-06-11.da52:0](#)**DUT: Dipole 1900 MHz D1900V2, Type: D1900V2, Serial: D1900V2 - SN:5d160**Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.403$  S/m;  $\epsilon_r = 40.169$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1900 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/1900 MHz Verification Input Power 250 mW 2020-06-11/Area Scan (7x11x1):**

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 13.7 W/kg

**Configuration/1900 MHz Verification Input Power 250 mW 2020-06-11/Zoom Scan****(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 106.2 V/m; Power Drift = -0.00 dB

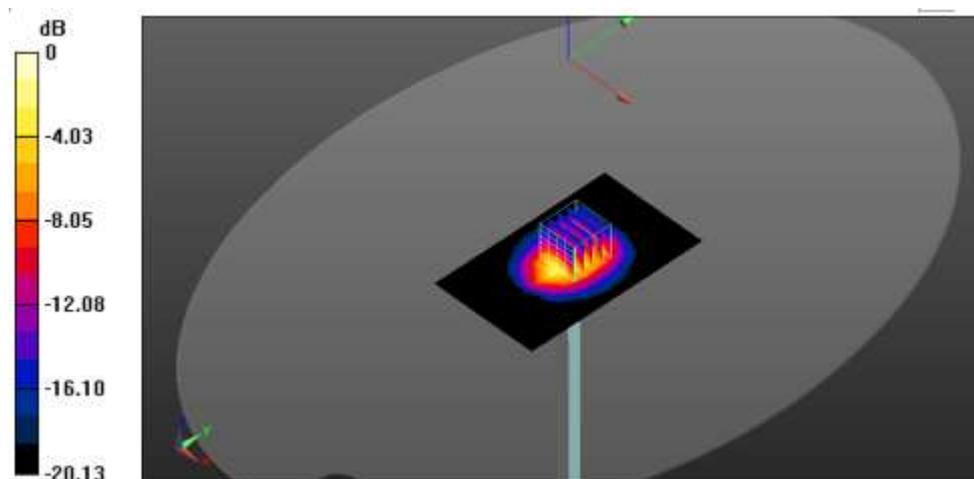
Peak SAR (extrapolated) = 19.7 W/kg

**SAR(1 g) = 9.88 W/kg; SAR(10 g) = 4.99 W/kg**

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 49.3%

Maximum value of SAR (measured) = 15.9 W/kg



0 dB = 15.9 W/kg = 12.01 dBW/kg

Date: 2020-06-12

Test Laboratory: KCTL Inc.

File Name: [1900 MHz Verification Input Power 250 mW 2020-06-12.da52:0](#)**DUT: Dipole 1900 MHz D1900V2, Type: D1900V2, Serial: D1900V2 - SN:5d160**Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.406$  S/m;  $\epsilon_r = 39.468$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1900 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/1900 MHz Verification Input Power 250 mW 2020-06-12/Area Scan (7x11x1):**

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 16.0 W/kg

**Configuration/1900 MHz Verification Input Power 250 mW 2020-06-12/Zoom Scan****(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 109.3 V/m; Power Drift = 0.14 dB

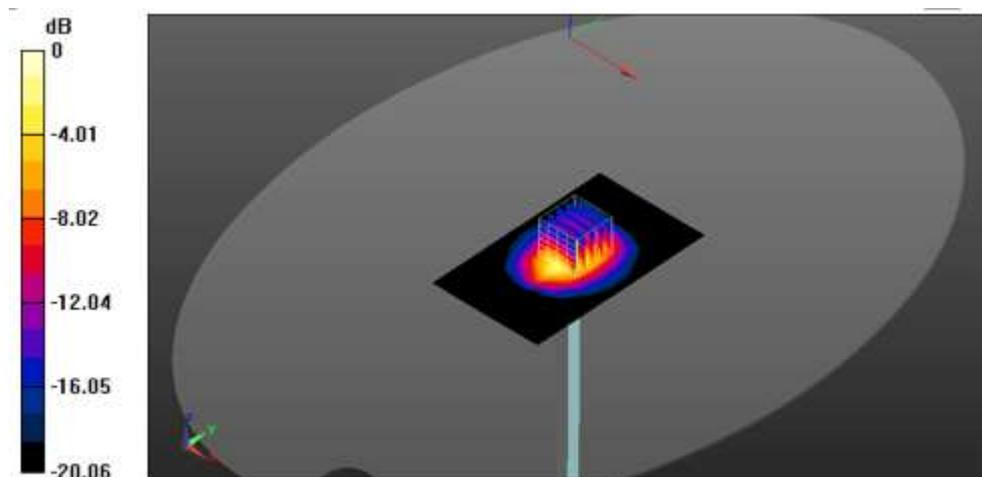
Peak SAR (extrapolated) = 20.4 W/kg

**SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.23 W/kg**

Smallest distance from peaks to all points 3 dB below = 11.2 mm

Ratio of SAR at M2 to SAR at M1 = 49.6%

Maximum value of SAR (measured) = 16.5 W/kg



0 dB = 16.5 W/kg = 12.17 dBW/kg

Date: 2020-05-25

Test Laboratory: KCTL Inc.

File Name: [2450 MHz Verification Input Power 100 mW 2020-05-25.da5:0](#)**DUT: Dipole 2450 MHz D2450V2, Type: D2450V2, Serial: D2450V2 - SN:895**

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

Medium parameters used (interpolated):  $f = 2450$  MHz;  $\sigma = 1.759$  S/m;  $\epsilon_r = 39.987$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2450 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/2450 MHz Verification Input Power 100 mW 2020-05-25/Area Scan (9x12x1):**

Measurement grid: dx=12mm, dy=12mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 8.25 W/kg

**Configuration/2450 MHz Verification Input Power 100 mW 2020-05-25/Zoom Scan****(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 73.54 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 11.6 W/kg

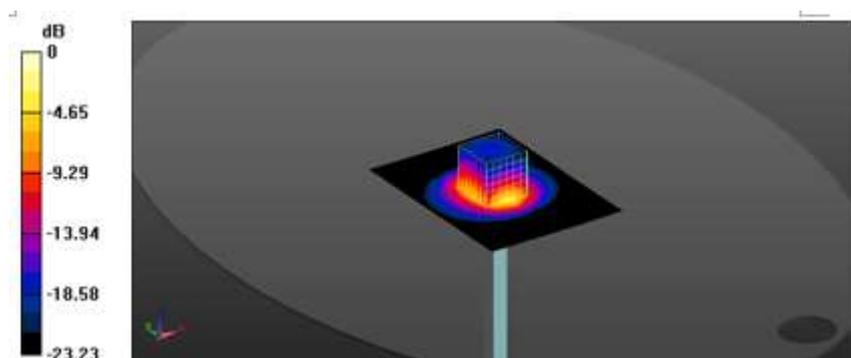
**SAR(1 g) = 5.37 W/kg; SAR(10 g) = 2.45 W/kg**

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 46%

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 9.20 W/kg



0 dB = 9.20 W/kg = 9.64 dBW/kg

Date: 2020-05-26

Test Laboratory: KCTL Inc.

File Name: [2450 MHz Verification Input Power 100 mW 2020-05-26.da5:0](#)**DUT: Dipole 2450 MHz D2450V2, Type: D2450V2, Serial: D2450V2 - SN:895**

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

Medium parameters used (interpolated):  $f = 2450$  MHz;  $\sigma = 1.781$  S/m;  $\epsilon_r = 39.958$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2450 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/2450 MHz Verification Input Power 100 mW 2020-05-26/Area Scan (9x12x1):**

Measurement grid: dx=12mm, dy=12mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 8.45 W/kg

**Configuration/2450 MHz Verification Input Power 100 mW 2020-05-26/Zoom Scan****(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 73.32 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 11.5 W/kg

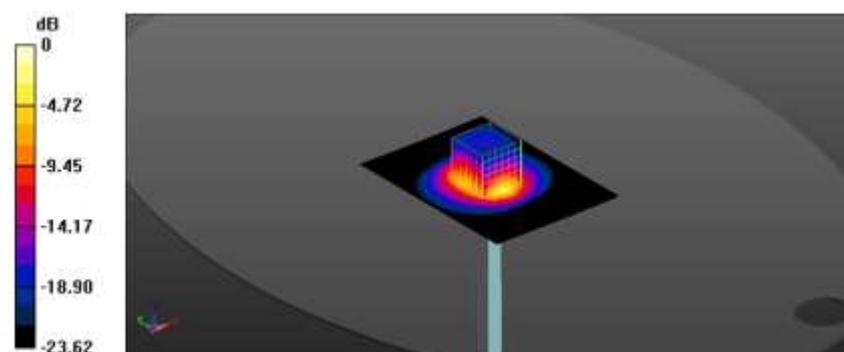
**SAR(1 g) = 5.32 W/kg; SAR(10 g) = 2.42 W/kg**

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 46%

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 9.14 W/kg



0 dB = 9.14 W/kg = 9.61 dBW/kg

Date: 2020-06-17

Test Laboratory: KCTL Inc.

File Name: [2450 MHz Verification Input Power 100 mW 2020-06-17.da5:0](#)**DUT: Dipole 2450 MHz D2450V2, Type: D2450V2, Serial: D2450V2 - SN:895**Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2450$  MHz;  $\sigma = 1.79$  S/m;  $\epsilon_r = 38.641$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2450 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/2450 MHz Verification Input Power 100 mW 2020-06-17/Area Scan (9x12x1):**  
Measurement grid: dx=12mm, dy=12mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 8.86 W/kg

**Configuration/2450 MHz Verification Input Power 100 mW 2020-06-17/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 73.80 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 11.6 W/kg

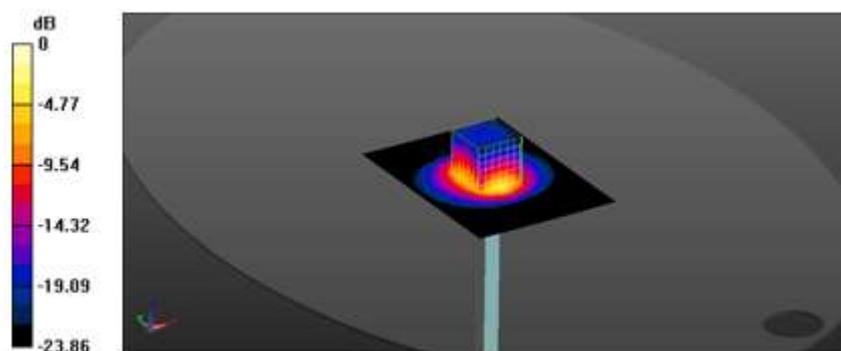
**SAR(1 g) = 5.29 W/kg; SAR(10 g) = 2.4 W/kg**

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 45.2%

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 9.17 W/kg



0 dB = 9.17 W/kg = 9.62 dBW/kg

Date: 2020-06-21

Test Laboratory: KCTL Inc.

File Name: [2450 MHz Verification Input Power 100 mW 2020-06-21.da5:0](#)**DUT: Dipole 2450 MHz D2450V2, Type: D2450V2, Serial: D2450V2 - SN:895**Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2450$  MHz;  $\sigma = 1.78$  S/m;  $\epsilon_r = 38.831$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2450 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/2450 MHz Verification Input Power 100 mW 2020-06-21/Area Scan (9x12x1):**  
Measurement grid: dx=12mm, dy=12mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 8.88 W/kg

**Configuration/2450 MHz Verification Input Power 100 mW 2020-06-21/Zoom Scan****(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 72.83 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 11.2 W/kg

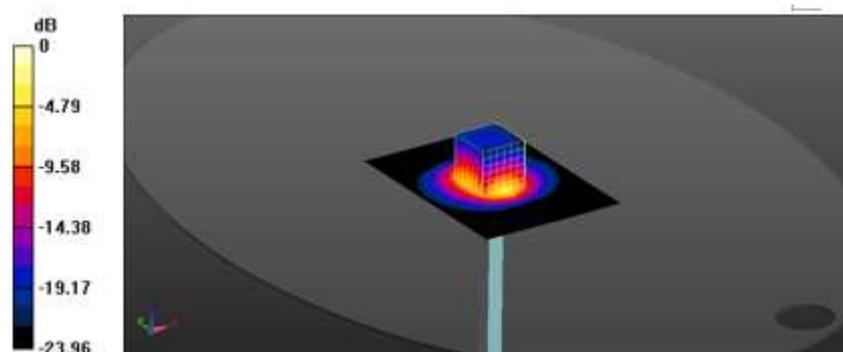
**SAR(1 g) = 5.13 W/kg; SAR(10 g) = 2.33 W/kg**

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 45.2%

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 8.87 W/kg



0 dB = 8.87 W/kg = 9.48 dBW/kg

Date: 2020-06-22

Test Laboratory: KCTL Inc.

File Name: [2450 MHz Verification Input Power 100 mW 2020-06-22.da5:0](#)**DUT: Dipole 2450 MHz D2450V2, Type: D2450V2, Serial: D2450V2 - SN:895**Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2450$  MHz;  $\sigma = 1.775$  S/m;  $\epsilon_r = 39.03$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2450 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/2450 MHz Verification Input Power 100 mW 2020-06-22/Area Scan (9x12x1):**  
Measurement grid: dx=12mm, dy=12mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 8.42 W/kg

**Configuration/2450 MHz Verification Input Power 100 mW 2020-06-22/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 72.56 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 11.6 W/kg

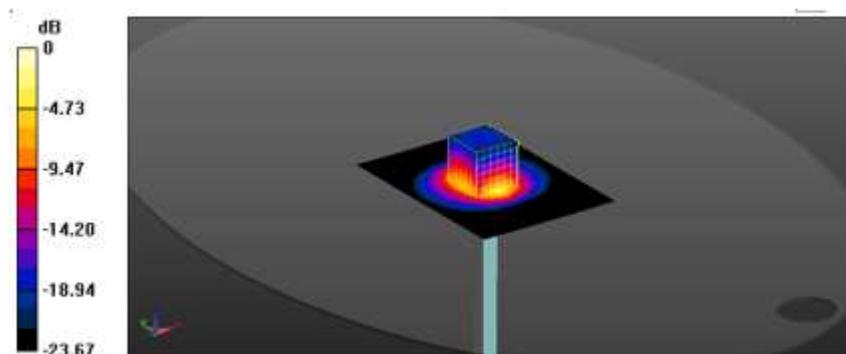
**SAR(1 g) = 5.26 W/kg; SAR(10 g) = 2.38 W/kg**

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 45.3%

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 9.10 W/kg



0 dB = 9.10 W/kg = 9.59 dBW/kg

Date: 2020-05-08

Test Laboratory: KCTL Inc.

File Name: [2600 MHz Verification Input Power 100 mW 2020-05-08.da5:0](#)**DUT: Dipole 2600 MHz D2600V2, Type: D2600V2, Serial: D2600V2 - SN:1050**Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.956$  S/m;  $\epsilon_r = 38.581$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(7.68, 7.68, 7.68) @ 2600 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1342; Calibrated: 2019-05-23
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/2600 MHz Verification Input Power 100 mW 2020-05-08/Area Scan (10x11x1):**

Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 6.80 W/kg

**Configuration/2600 MHz Verification Input Power 100 mW 2020-05-08/Zoom Scan****(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 71.57 V/m; Power Drift = -0.00 dB

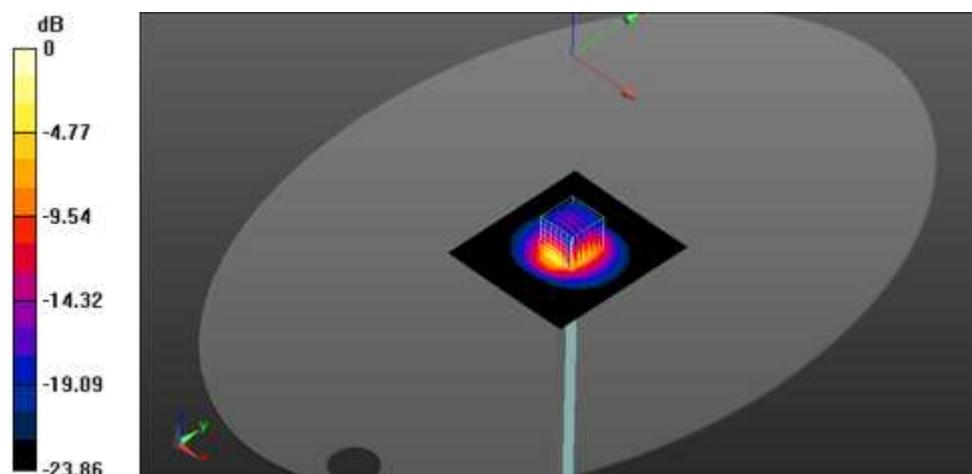
Peak SAR (extrapolated) = 11.8 W/kg

**SAR(1 g) = 5.48 W/kg; SAR(10 g) = 2.45 W/kg**

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 47.1%

Maximum value of SAR (measured) = 9.31 W/kg



0 dB = 9.31 W/kg = 9.69 dBW/kg

Date: 2020-06-13

Test Laboratory: KCTL Inc.

File Name: [2600 MHz Verification Input Power 100 mW 2020-06-13.da5:0](#)**DUT: Dipole 2600 MHz D2600V2, Type: D2600V2, Serial: D2600V2 - SN:1050**Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.94$  S/m;  $\epsilon_r = 40.026$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(7.68, 7.68, 7.68) @ 2600 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/2600 MHz Verification Input Power 100 mW 2020-06-13/Area Scan (10x11x1):**

Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 7.34 W/kg

**Configuration/2600 MHz Verification Input Power 100 mW 2020-06-13/Zoom Scan****(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 74.17 V/m; Power Drift = -0.06 dB

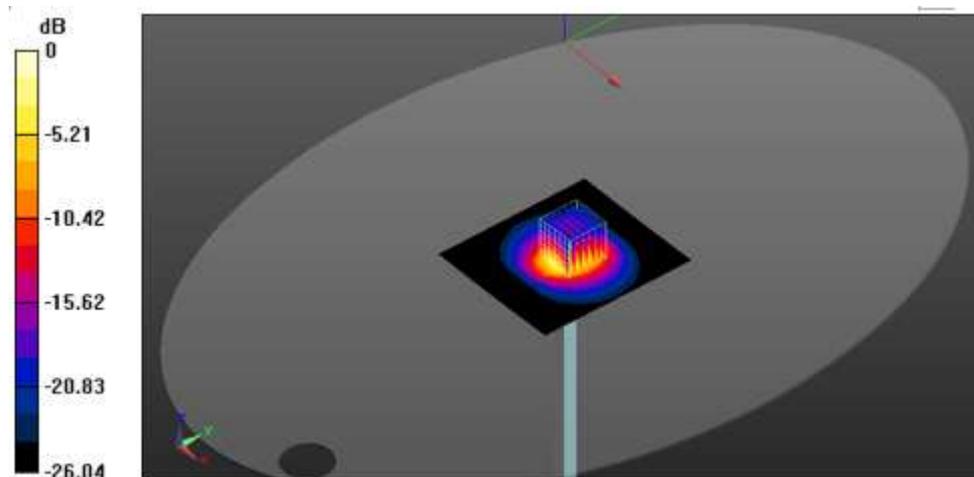
Peak SAR (extrapolated) = 12.5 W/kg

**SAR(1 g) = 5.41 W/kg; SAR(10 g) = 2.32 W/kg**

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

Ratio of SAR at M2 to SAR at M1 = 43.6%

Maximum value of SAR (measured) = 9.56 W/kg



0 dB = 9.56 W/kg = 9.80 dBW/kg

Date: 2020-05-28

Test Laboratory: KCTL Inc.

File Name: [5300 MHz Verification Input Power 100 mW 2020-05-28.da5:0](#)**DUT: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1293**

Communication System: UID 0, CW (0); Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 5300$  MHz;  $\sigma = 4.779$  S/m;  $\epsilon_r = 35.173$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(4.94, 4.94, 4.94) @ 5300 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/5300 MHz Verification Input Power 100 mW 2020-05-28/Area Scan (10x12x1):**

Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 12.2 W/kg

**Configuration/5300 MHz Verification Input Power 100 mW 2020-05-28/Zoom Scan****(9x9x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 68.94 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 35.4 W/kg

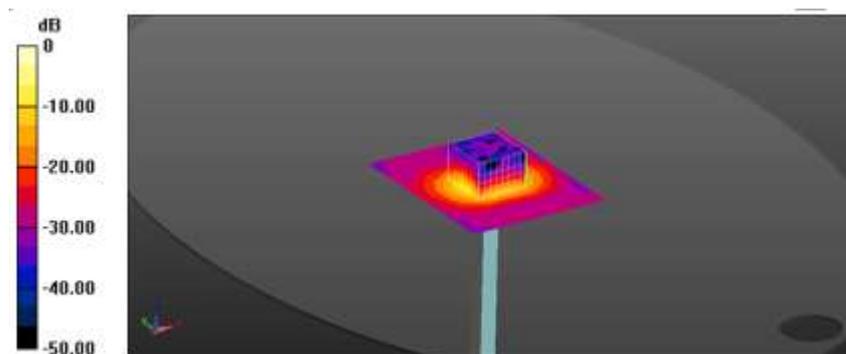
**SAR(1 g) = 7.64 W/kg; SAR(10 g) = 2.19 W/kg**

Smallest distance from peaks to all points 3 dB below = 7.4 mm

Ratio of SAR at M2 to SAR at M1 = 61.6%

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 20.0 W/kg



0 dB = 20.0 W/kg = 13.01 dBW/kg

Date: 2020-06-19

Test Laboratory: KCTL Inc.

File Name: [5300 MHz Verification Input Power 100 mW 2020-06-19.da5:0](#)**DUT: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1293**

Communication System: UID 0, CW (0); Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 5300$  MHz;  $\sigma = 4.674$  S/m;  $\epsilon_r = 36.081$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(4.94, 4.94, 4.94) @ 5300 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/5300 MHz Verification Input Power 100 mW 2020-06-19/Area Scan (10x12x1):**

Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 12.5 W/kg

**Configuration/5300 MHz Verification Input Power 100 mW 2020-06-19/Zoom Scan****(9x9x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 76.88 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 37.1 W/kg

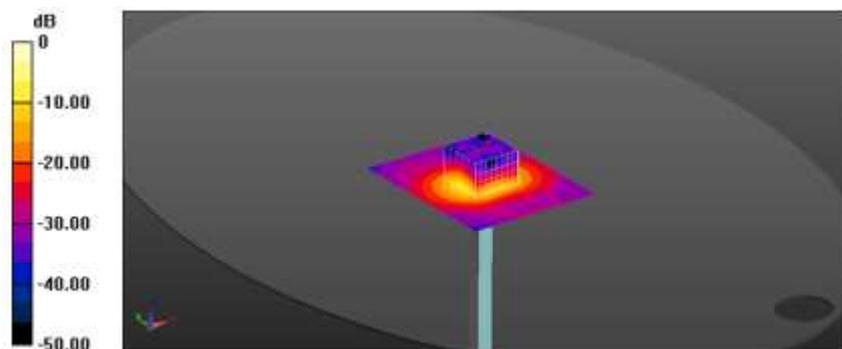
**SAR(1 g) = 8.44 W/kg; SAR(10 g) = 2.43 W/kg**

Smallest distance from peaks to all points 3 dB below = 7.4 mm

Ratio of SAR at M2 to SAR at M1 = 62%

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 21.7 W/kg



0 dB = 21.7 W/kg = 13.36 dBW/kg

Date: 2020-06-06

Test Laboratory: KCTL Inc.

File Name: [5600 MHz Verification Input Power 100 mW 2020-06-06.da5:0](#)**DUT: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1293**Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.131$  S/m;  $\epsilon_r = 34.755$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(4.69, 4.69, 4.69) @ 5600 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/5600 MHz Verification Input Power 100 mW 2020-06-06/Area Scan (10x12x1):**

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 14.9 W/kg

**Configuration/5600 MHz Verification Input Power 100 mW 2020-06-06/Zoom Scan****(9x9x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 69.32 V/m; Power Drift = 0.76 dB

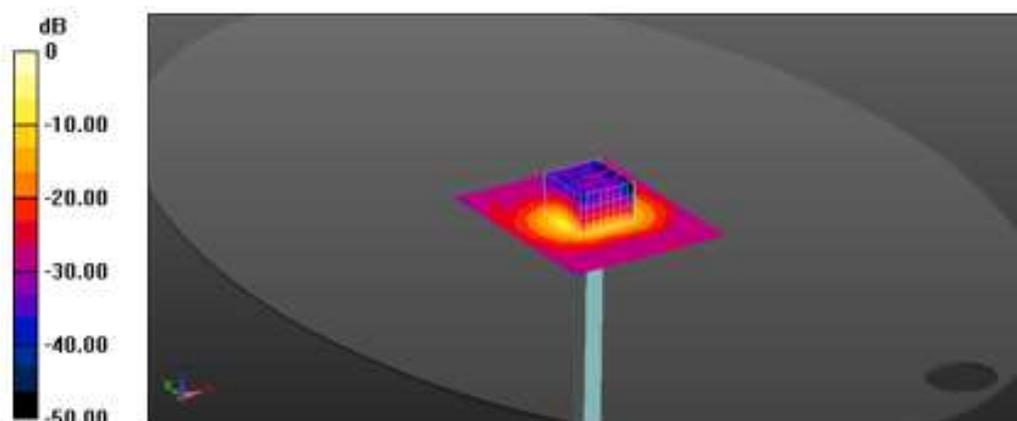
Peak SAR (extrapolated) = 37.8 W/kg

**SAR(1 g) = 8.2 W/kg; SAR(10 g) = 2.35 W/kg**

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

Ratio of SAR at M2 to SAR at M1 = 61.6%

Maximum value of SAR (measured) = 21.4 W/kg



0 dB = 21.4 W/kg = 13.30 dBW/kg

Date: 2020-06-18

Test Laboratory: KCTL Inc.

File Name: [5600 MHz Verification Input Power 100 mW 2020-06-18.da5:0](#)**DUT: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1293**Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 5600$  MHz;  $\sigma = 4.975$  S/m;  $\epsilon_r = 35.136$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(4.69, 4.69, 4.69) @ 5600 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/5600 MHz Verification Input Power 100 mW 2020-06-18/Area Scan (10x12x1):**

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 12.6 W/kg

**Configuration/5600 MHz Verification Input Power 100 mW 2020-06-18/Zoom Scan****(7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 74.70 V/m; Power Drift = -0.04 dB

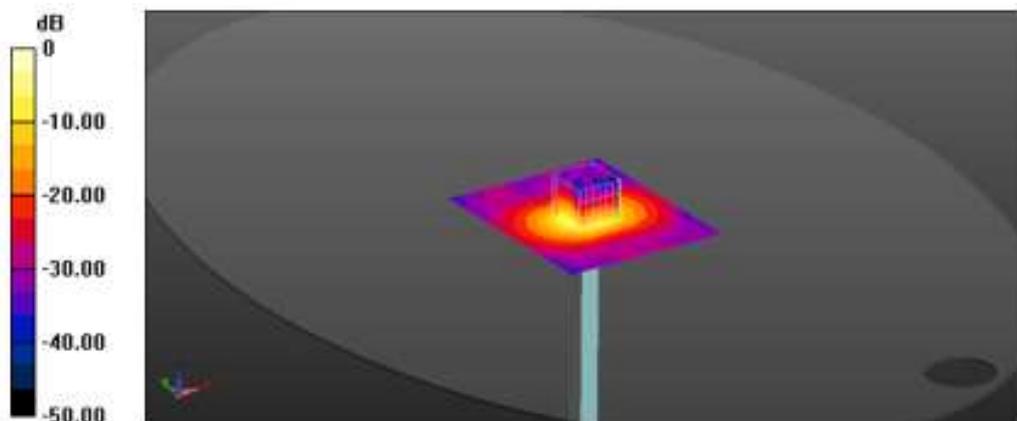
Peak SAR (extrapolated) = 36.1 W/kg

**SAR(1 g) = 8.26 W/kg; SAR(10 g) = 2.37 W/kg**

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

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

Maximum value of SAR (measured) = 21.5 W/kg



0 dB = 21.5 W/kg = 13.32 dBW/kg

Date: 2020-06-08

Test Laboratory: KCTL Inc.

File Name: [5800 MHz Verification Input Power 100 mW 2020-06-08.da5:0](#)**DUT: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1293**Communication System: UID 0, CW (0); Frequency: 5800 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 5800$  MHz;  $\sigma = 5.357$  S/m;  $\epsilon_r = 34.585$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(4.65, 4.65, 4.65) @ 5800 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/5800 MHz Verification Input Power 100 mW 2020-06-08/Area Scan (10x12x1):**

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 13.6 W/kg

**Configuration/5800 MHz Verification Input Power 100 mW 2020-06-08/Zoom Scan****(9x9x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 71.44 V/m; Power Drift = 0.02 dB

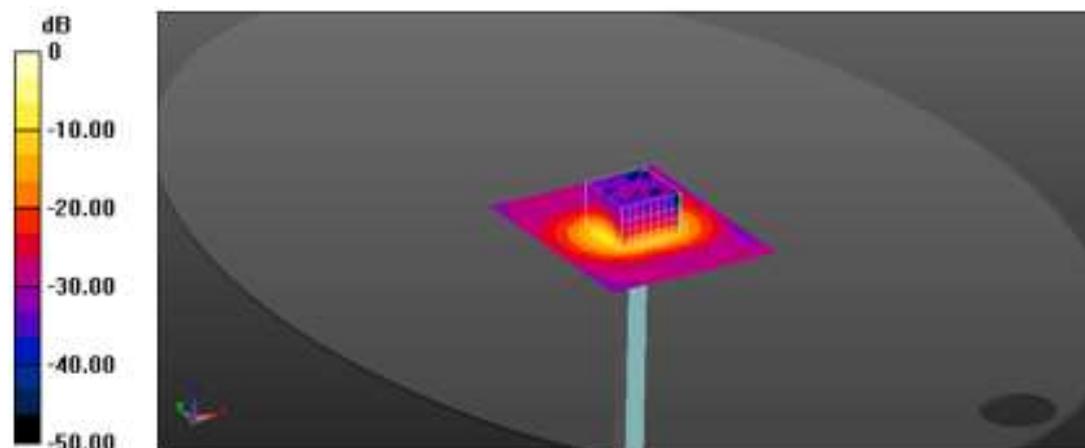
Peak SAR (extrapolated) = 38.4 W/kg

**SAR(1 g) = 8.36 W/kg; SAR(10 g) = 2.41 W/kg**

Smallest distance from peaks to all points 3 dB below = 7.4 mm

Ratio of SAR at M2 to SAR at M1 = 61.6%

Maximum value of SAR (measured) = 21.9 W/kg



0 dB = 21.9 W/kg = 13.40 dBW/kg

Date: 2020-06-20

Test Laboratory: KCTL Inc.

File Name: [5800 MHz Verification Input Power 100 mW 2020-06-20.da5:0](#)**DUT: Dipole D5GHzV2, Type: D5GHzV2, Serial: D5GHzV2 - SN:1293**Communication System: UID 0, CW (0); Frequency: 5800 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 5800$  MHz;  $\sigma = 5.143$  S/m;  $\epsilon_r = 35.731$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(4.65, 4.65, 4.65) @ 5800 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/5800 MHz Verification Input Power 100 mW 2020-06-20/Area Scan (10x12x1):**

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 14.0 W/kg

**Configuration/5800 MHz Verification Input Power 100 mW 2020-06-20/Zoom Scan****(7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 71.54 V/m; Power Drift = -0.04 dB

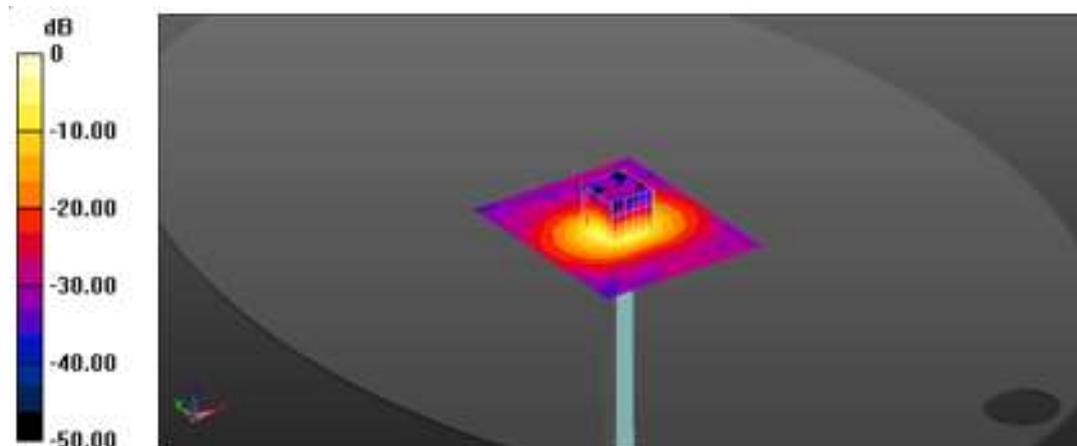
Peak SAR (extrapolated) = 35.8 W/kg

**SAR(1 g) = 8.16 W/kg; SAR(10 g) = 2.34 W/kg**

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

Ratio of SAR at M2 to SAR at M1 = 62%

Maximum value of SAR (measured) = 21.1 W/kg



0 dB = 21.1 W/kg = 13.24 dBW/kg

## 18. Test Results

1)

Date: 2020-06-20

Test Laboratory: KCTL Inc.

File Name: [1.GSM850 Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500LL4B**Communication System: UID 0, GSM850\_2TX (0); Frequency: 848.8 MHz; Duty Cycle:  
1:4.14954Medium parameters used:  $f = 848.8$  MHz;  $\sigma = 0.92$  S/m;  $\epsilon_r = 41.46$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 848.8 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/GSM850\_GPRS 2Tx\_CH251\_Rear\_0 mm Grip Sensor On/Area Scan (9x7x1):**

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.671 W/kg

**Configuration/GSM850\_GPRS 2Tx\_CH251\_Rear\_0 mm Grip Sensor On/Zoom Scan****(11x10x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 28.41 V/m; Power Drift = -0.03 dB

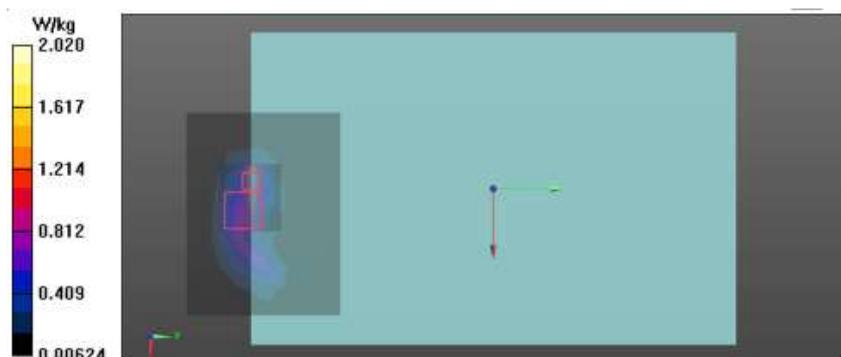
Peak SAR (extrapolated) = 6.05 W/kg

**SAR(1 g) = 0.743 W/kg; SAR(10 g) = 0.316 W/kg**

Smallest distance from peaks to all points 3 dB below = 4 mm

Ratio of SAR at M2 to SAR at M1 = 47.6%

Maximum value of SAR (measured) = 2.02 W/kg



2)

Date: 2020-06-09

Test Laboratory: KCTL Inc.

File Name: [1.GSM1900 Body.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KAR**Communication System: UID 0, GSM 1900\_2Tx (0); Frequency: 1880 MHz; Duty Cycle:  
1:4.14954Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.407$  S/m;  $\epsilon_r = 39.33$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1880 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/GSM1900\_GPRS 2Tx\_CH661\_Rear\_0 mm Grip Sensor On RE/Area Scan****(9x8x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.26 W/kg

**Configuration/GSM1900\_GPRS 2Tx\_CH661\_Rear\_0 mm Grip Sensor On RE/Zoom Scan****(8x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.24 V/m; Power Drift = 0.01 dB

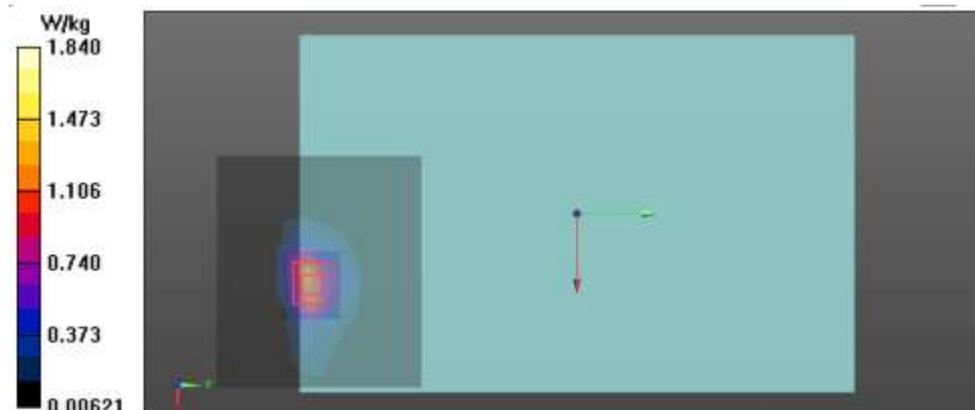
Peak SAR (extrapolated) = 2.71 W/kg

**SAR(1 g) = 0.893 W/kg; SAR(10 g) = 0.364 W/kg**

Smallest distance from peaks to all points 3 dB below = 7 mm

Ratio of SAR at M2 to SAR at M1 = 33.1%

Maximum value of SAR (measured) = 1.84 W/kg



3)

Date: 2020-06-09

Test Laboratory: KCTL Inc.

File Name: [1.WCDMA FDD II Body.da53:2](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KAR**

Communication System: UID 0, W-CDMA 1900 (Band 2) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.407$  S/m;  $\epsilon_r = 39.33$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1880 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/WCDMA FDD II\_CH9400\_Top\_0 mm Grip Sensor On/Area Scan (7x9x1):**

Measurement grid: dx=15mm, dy=15mm

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

**Configuration 3/WCDMA FDD II\_CH9400\_Top\_0 mm Grip Sensor On/Zoom Scan****(9x9x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 16.10 V/m; Power Drift = -0.09 dB

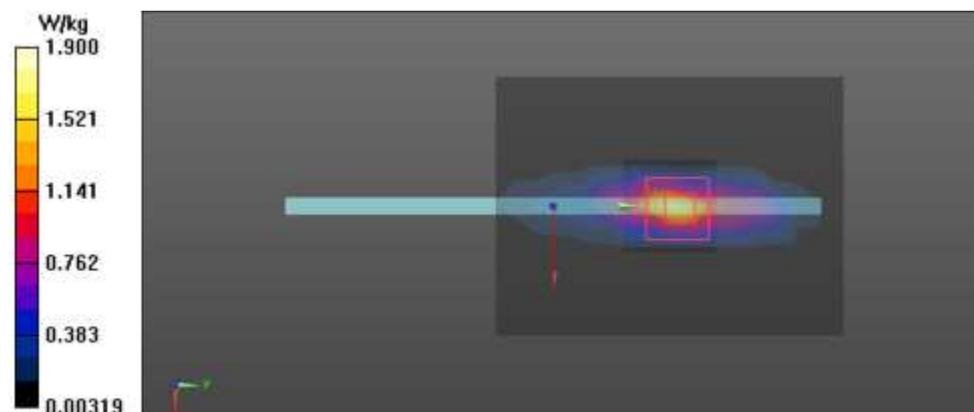
Peak SAR (extrapolated) = 3.46 W/kg

**SAR(1 g) = 0.794 W/kg; SAR(10 g) = 0.294 W/kg**

Smallest distance from peaks to all points 3 dB below = 5.1 mm

Ratio of SAR at M2 to SAR at M1 = 62.7%

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



4)

Date: 2020-06-10

Test Laboratory: KCTL Inc.

File Name: [1.WCDMA FDD IV Body.da53:2](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KAR**

Communication System: UID 0, W-CDMA 1700 (Band4) (0); Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1732.4$  MHz;  $\sigma = 1.357$  S/m;  $\epsilon_r = 39.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(9.01, 9.01, 9.01) @ 1732.4 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/WCDMA FDD IV\_CH1412\_Top\_0 mm Grip Sensor On/Area Scan (7x9x1):**

Measurement grid: dx=15mm, dy=15mm

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

**Configuration 3/WCDMA FDD IV\_CH1412\_Top\_0 mm Grip Sensor On/Zoom Scan (9x10x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 15.02 V/m; Power Drift = 0.14 dB

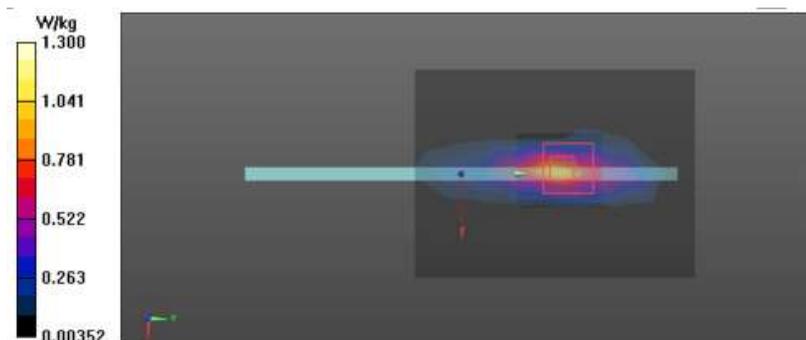
Peak SAR (extrapolated) = 2.23 W/kg

**SAR(1 g) = 0.559 W/kg; SAR(10 g) = 0.218 W/kg**

Smallest distance from peaks to all points 3 dB below = 5.4 mm

Ratio of SAR at M2 to SAR at M1 = 65%

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



5)

Date: 2020-06-19

Test Laboratory: KCTL Inc.

File Name: [1.WCDMA FDD V Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500LL4B**

Communication System: UID 0, W-CDMA 850 (Band 5) (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.897$  S/m;  $\epsilon_r = 40.935$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 836.6 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/WCDMA FDD V\_CH4183\_Top\_0 mm Grip Sensor On/Area Scan (7x10x1):**

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.35 W/kg

**Configuration 3/WCDMA FDD V\_CH4183\_Top\_0 mm Grip Sensor On/Zoom Scan****(9x11x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 36.71 V/m; Power Drift = -0.07 dB

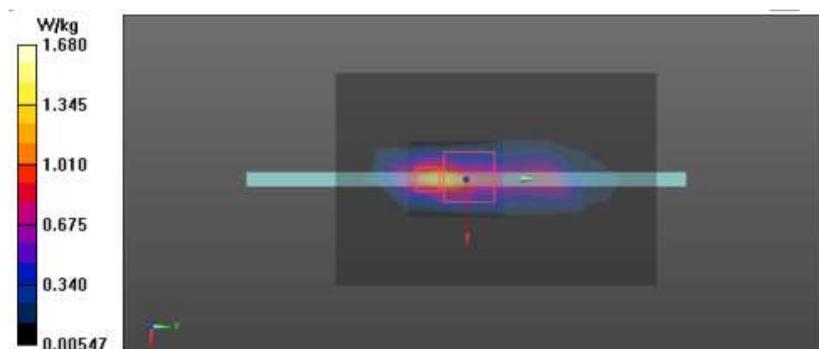
Peak SAR (extrapolated) = 4.78 W/kg

**SAR(1 g) = 0.610 W/kg; SAR(10 g) = 0.237 W/kg**

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

Ratio of SAR at M2 to SAR at M1 = 49%

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



6)

Date: 2020-06-06

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 2 QPSK 20 MHz Body.da53:2](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006K8K**

Communication System: UID 0, LTE Band 2 (0); Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.417$  S/m;  $\epsilon_r = 39.26$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1900 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/LTE Band 2\_QPSK\_20 MHz\_50RB\_24offset\_CH19100\_Top\_0 mm Grip  
Sensor On Repeated/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.73 W/kg

**Configuration 3/LTE Band 2\_QPSK\_20 MHz\_50RB\_24offset\_CH19100\_Top\_0 mm Grip  
Sensor On Repeated/Zoom Scan (9x9x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm,  
dz=1.4mm

Reference Value = 15.85 V/m; Power Drift = -0.07 dB

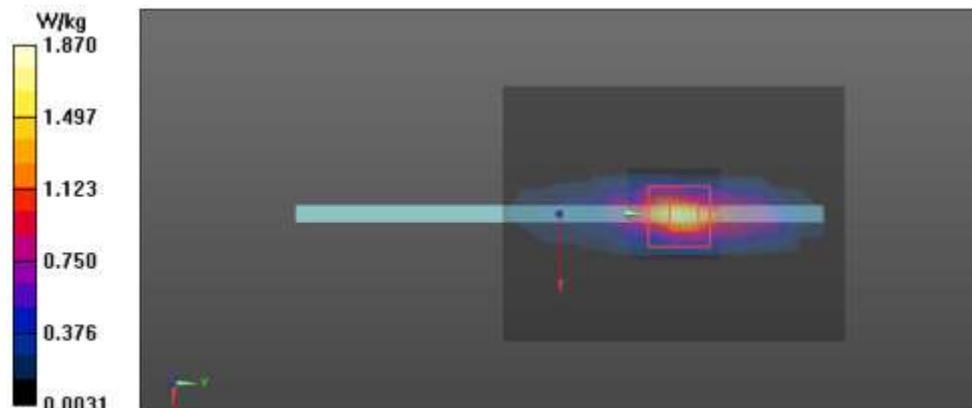
Peak SAR (extrapolated) = 3.63 W/kg

**SAR(1 g) = 0.811 W/kg; SAR(10 g) = 0.297 W/kg**

Smallest distance from peaks to all points 3 dB below = 4.8 mm

Ratio of SAR at M2 to SAR at M1 = 63.6%

Maximum value of SAR (measured) = 1.87 W/kg



7)

Date: 2020-06-17

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 5 QPSK 10 MHz Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500LL4B**

Communication System: UID 0, LTE Band 5 (0); Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 0.894$  S/m;  $\epsilon_r = 40.675$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 836.5 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/LTE Band 5\_QPSK\_10 MHz\_50RB\_0offset\_CH20525\_Top\_0 mm Grip Sensor On/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.81 W/kg

**Configuration 3/LTE Band 5\_QPSK\_10 MHz\_50RB\_0offset\_CH20525\_Top\_0 mm Grip Sensor On/Zoom Scan (9x18x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 43.57 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 6.07 W/kg

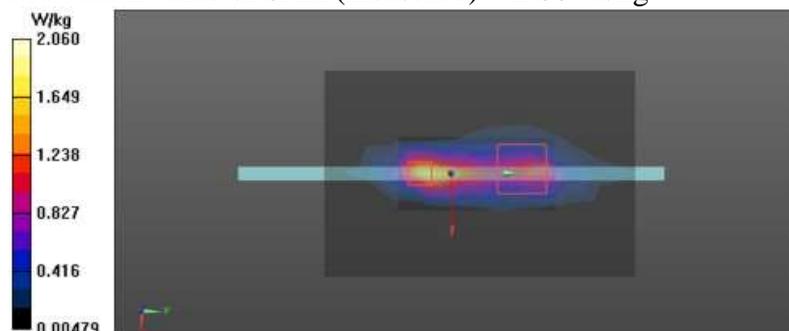
**SAR(1 g) = 0.761 W/kg; SAR(10 g) = 0.320 W/kg**

Smallest distance from peaks to all points 3 dB below = 4.1 mm

Ratio of SAR at M2 to SAR at M1 = 48.4%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.06 W/kg



8)

Date: 2020-06-22

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 12 QPSK 10 MHz Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500LL4B**

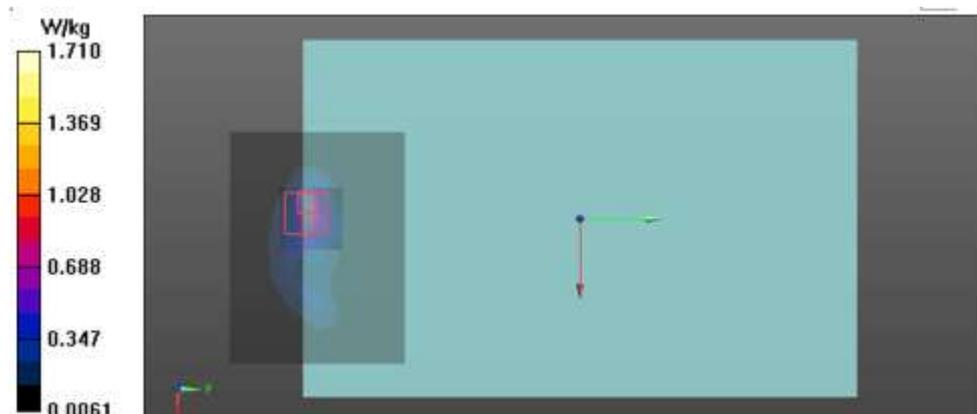
Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 707.5$  MHz;  $\sigma = 0.878$  S/m;  $\epsilon_r = 43.293$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.45, 10.45, 10.45) @ 707.5 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/LTE Band 12\_QPSK\_10 MHz\_25RB\_12offset\_CH23095\_Rear\_0 mm Grip**  
**Sensor On/Area Scan (9x7x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.684 W/kg

**Configuration/LTE Band 12\_QPSK\_10 MHz\_25RB\_12offset\_CH23095\_Rear\_0 mm Grip**  
**Sensor On/Zoom Scan (9x9x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 20.87 V/m; Power Drift = -0.05 dB  
Peak SAR (extrapolated) = 7.01 W/kg  
**SAR(1 g) = 0.652 W/kg; SAR(10 g) = 0.220 W/kg**  
Smallest distance from peaks to all points 3 dB below = 4 mm  
Ratio of SAR at M2 to SAR at M1 = 47.4%  
Maximum value of SAR (measured) = 1.71 W/kg



9)

Date: 2020-06-21

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 13 QPSK 10 MHz Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500MC6D**

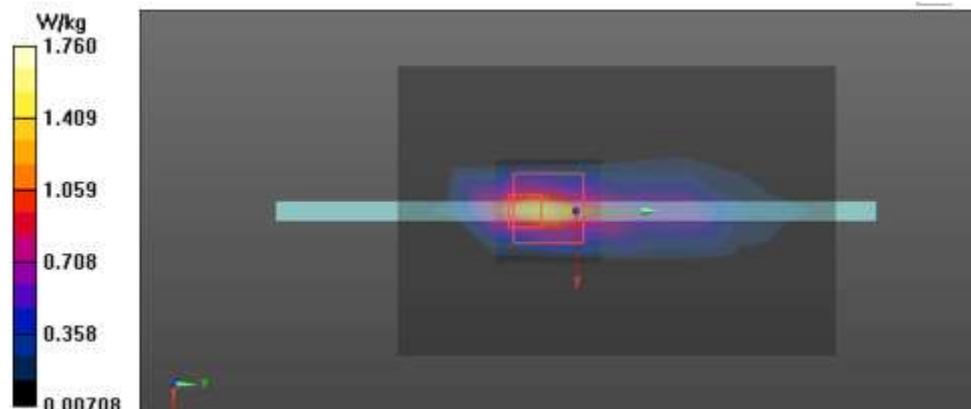
Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 782$  MHz;  $\sigma = 0.905$  S/m;  $\epsilon_r = 42.745$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.45, 10.45, 10.45) @ 782 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/LTE Band 13\_QPSK\_10 MHz\_50RB\_0offset\_CH23230\_Top\_0 mm Grip Sensor On/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.45 W/kg

**Configuration 3/LTE Band 13\_QPSK\_10 MHz\_50RB\_0offset\_CH23230\_Top\_0 mm Grip Sensor On/Zoom Scan (9x9x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 38.15 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 4.74 W/kg  
**SAR(1 g) = 0.646 W/kg; SAR(10 g) = 0.247 W/kg**  
Smallest distance from peaks to all points 3 dB below = 4.3 mm  
Ratio of SAR at M2 to SAR at M1 = 50.4%  
Maximum value of SAR (measured) = 1.76 W/kg



10)

Date: 2020-06-07

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 25 QPSK 20 MHz Body.da53:2](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KAR**Communication System: UID 0, LTE Band 25 (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1882.5$  MHz;  $\sigma = 1.389$  S/m;  $\epsilon_r = 39.494$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1882.5 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/LTE Band 25\_QPSK\_20 MHz\_50RB\_24offset\_CH26365\_Top\_0 mm Grip Sensor On/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.63 W/kg

**Configuration 3/LTE Band 25\_QPSK\_20 MHz\_50RB\_24offset\_CH26365\_Top\_0 mm Grip Sensor On/Zoom Scan (9x9x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 15.21 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 3.65 W/kg

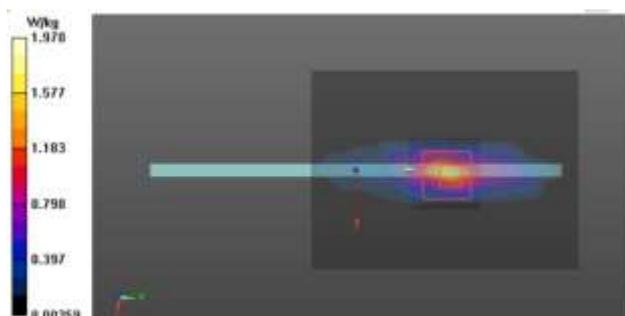
**SAR(1 g) = 0.799 W/kg; SAR(10 g) = 0.291 W/kg**

Smallest distance from peaks to all points 3 dB below = 4.8 mm

Ratio of SAR at M2 to SAR at M1 = 61.6%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.97 W/kg



11)

Date: 2020-06-18

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 26 QPSK 15 MHz Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500MC6D**

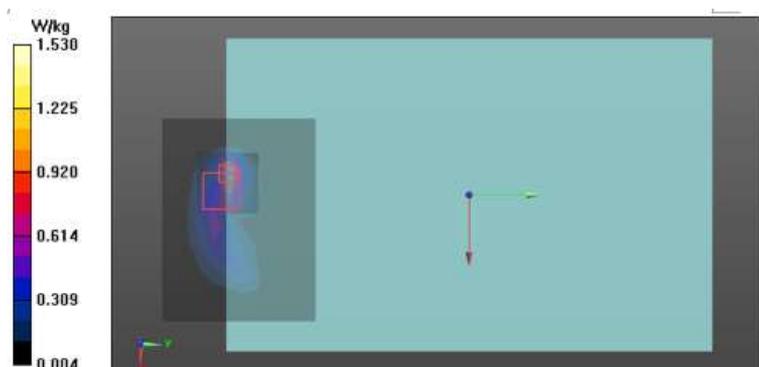
Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 831.5$  MHz;  $\sigma = 0.884$  S/m;  $\epsilon_r = 40.811$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 831.5 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/LTE Band 26\_QPSK\_15 MHz\_1RB\_0offset\_CH26865\_Rear\_0 mm Grip Sensor On/Area Scan (9x7x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.501 W/kg

**Configuration/LTE Band 26\_QPSK\_15 MHz\_1RB\_0offset\_CH26865\_Rear\_0 mm Grip Sensor On/Zoom Scan (10x10x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 27.56 V/m; Power Drift = -0.02 dB  
Peak SAR (extrapolated) = 5.60 W/kg  
**SAR(1 g) = 0.587 W/kg; SAR(10 g) = 0.225 W/kg**  
Smallest distance from peaks to all points 3 dB below = 4 mm  
Ratio of SAR at M2 to SAR at M1 = 46.4%  
Maximum value of SAR (measured) = 1.53 W/kg



12)

Date: 2020-05-08

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 41 QPSK 20 MHz Body.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KAR**Communication System: UID 0, LTE Band41 (0); Frequency: 2636.5 MHz; Duty Cycle:  
1:1.58016Medium parameters used (interpolated):  $f = 2636.5$  MHz;  $\sigma = 2.014$  S/m;  $\epsilon_r = 38.364$ ;  $\rho = 1000$   
kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(7.68, 7.68, 7.68) @ 2636.5 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1342; Calibrated: 2019-05-23
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/LTE Band 41\_QPSK\_20 MHz\_1RB\_49offset\_CH41055\_Rear\_0 mm Grip  
Sensor On/Area Scan (10x8x1):** Measurement grid: dx=12mm, dy=12mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.905 W/kg

**Configuration/LTE Band 41\_QPSK\_20 MHz\_1RB\_49offset\_CH41055\_Rear\_0 mm Grip  
Sensor On/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.65 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.72 W/kg

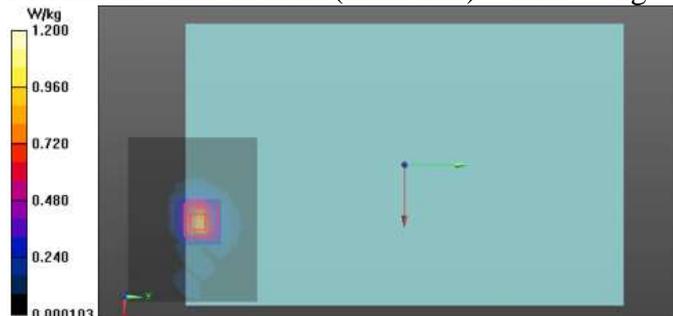
**SAR(1 g) = 0.623 W/kg; SAR(10 g) = 0.251 W/kg**

Smallest distance from peaks to all points 3 dB below = 6.3 mm

Ratio of SAR at M2 to SAR at M1 = 39.9%

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.20 W/kg



13)

Date: 2020-06-08

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 66 QPSK 20 MHz Body.da53:2](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006K8K**

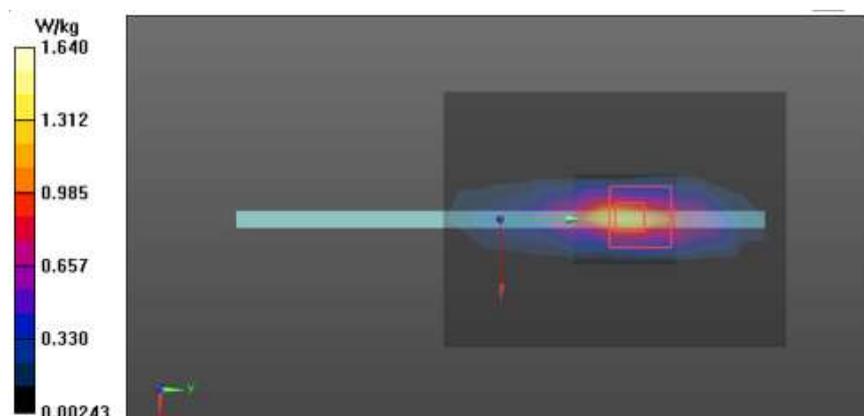
Communication System: UID 0, LTE Band 66 (0); Frequency: 1770 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1770$  MHz;  $\sigma = 1.365$  S/m;  $\epsilon_r = 39.061$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(9.01, 9.01, 9.01) @ 1770 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/LTE Band 66\_QPSK\_20 MHz\_100RB\_0offset\_CH132572\_Top\_0 mm Grip**  
**Sensor On/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.38 W/kg

**Configuration 3/LTE Band 66\_QPSK\_20 MHz\_100RB\_0offset\_CH132572\_Top\_0 mm Grip**  
**Sensor On/Zoom Scan (9x10x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 16.73 V/m; Power Drift = 0.12 dB  
Peak SAR (extrapolated) = 2.91 W/kg  
**SAR(1 g) = 0.724 W/kg; SAR(10 g) = 0.279 W/kg**  
Smallest distance from peaks to all points 3 dB below = 5.1 mm  
Ratio of SAR at M2 to SAR at M1 = 64.9%  
Maximum value of SAR (measured) = 1.64 W/kg



14)

Date: 2020-05-26

Test Laboratory: KCTL Inc.

File Name: [1. 2.4G 802.11 Body Back-off.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KDX**

Communication System: UID 0, 2.4GWLAN (0); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.743$  S/m;  $\epsilon_r = 40.068$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928;ConvF(7.33, 7.33, 7.33) @ 2412 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/802.11 b\_WLAN2\_CH1\_Rear\_0 mm Sensor On/Area Scan (11x9x1):**

Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.923 W/kg

**Configuration/802.11 b\_WLAN2\_CH1\_Rear\_0 mm Sensor On/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.49 V/m; Power Drift = -0.14 dB

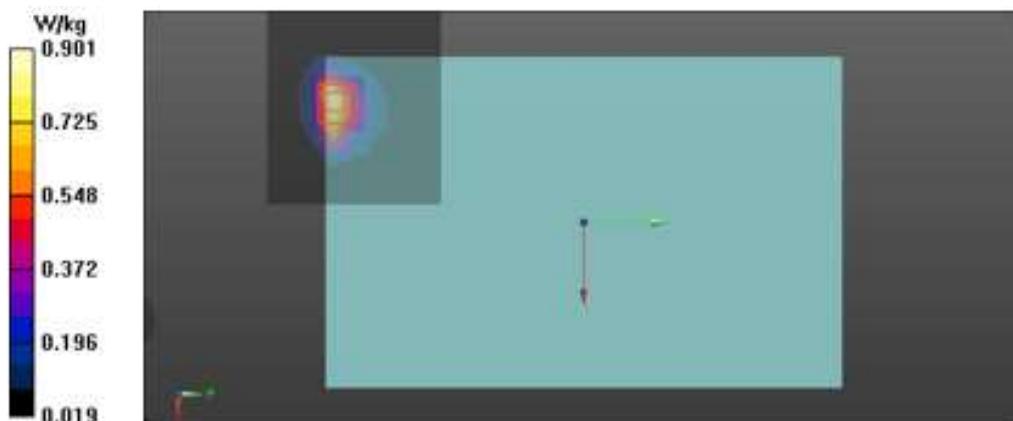
Peak SAR (extrapolated) = 1.42 W/kg

**SAR(1 g) = 0.564 W/kg; SAR(10 g) = 0.267 W/kg**

Smallest distance from peaks to all points 3 dB below = 6 mm

Ratio of SAR at M2 to SAR at M1 = 42.2%

Maximum value of SAR (measured) = 0.901 W/kg



15)

Date: 2020-05-26

Test Laboratory: KCTL Inc.

File Name: [1. 2.4G 802.11 Body Back-off.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KDX**

Communication System: UID 0, 2.4GWLAN (0); Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.794$  S/m;  $\epsilon_r = 39.93$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928;ConvF(7.33, 7.33, 7.33) @ 2462 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/802.11 b\_MIMO\_CH11\_Rear\_0 mm Sensor On/Area Scan (21x9x1):**

Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.964 W/kg

**Configuration/802.11 b\_MIMO\_CH11\_Rear\_0 mm Sensor On/Zoom Scan (7x7x7)/Cube 0:**

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.62 V/m; Power Drift = -0.04 dB

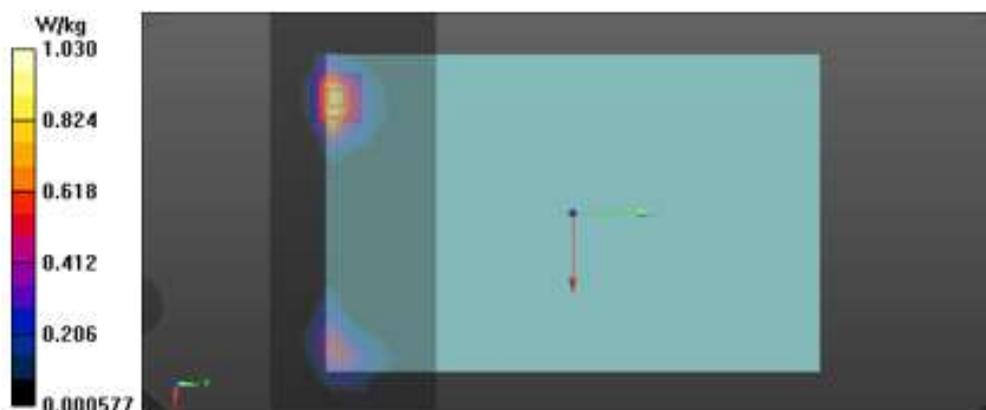
Peak SAR (extrapolated) = 1.49 W/kg

**SAR(1 g) = 0.621 W/kg; SAR(10 g) = 0.275 W/kg**

Smallest distance from peaks to all points 3 dB below = 6 mm

Ratio of SAR at M2 to SAR at M1 = 51.4%

Maximum value of SAR (measured) = 1.03 W/kg



16)

Date: 2020-05-28

Test Laboratory: KCTL Inc.

File Name: [1. 5.3G 802.11 Body.da53:1](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KDX**

Communication System: UID 0, 5GWLAN (0); Frequency: 5280 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5280$  MHz;  $\sigma = 4.779$  S/m;  $\epsilon_r = 35.172$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928;ConvF(4.94, 4.94, 4.94) @ 5280 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 2/802.11 a WLAN1\_CH56\_Right\_7 mm Sensor Off/Area Scan (9x14x1):**

Measurement grid: dx=10mm, dy=10mm

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

**Configuration 2/802.11 a WLAN1\_CH56\_Right\_7 mm Sensor Off/Zoom Scan (8x8x7)/Cube 0:**

Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 5.901 V/m; Power Drift = 0.12 dB

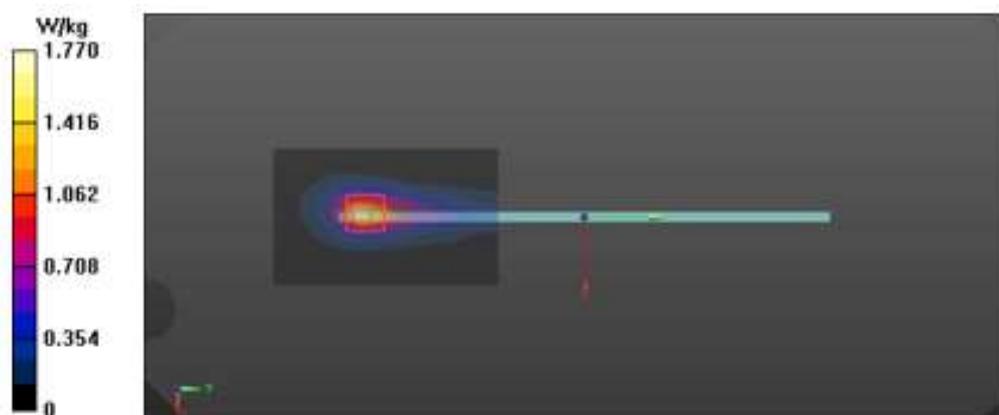
Peak SAR (extrapolated) = 2.99 W/kg

**SAR(1 g) = 0.766 W/kg; SAR(10 g) = 0.269 W/kg**

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

Ratio of SAR at M2 to SAR at M1 = 63%

Maximum value of SAR (measured) = 1.77 W/kg



17)

Date: 2020-05-28

Test Laboratory: KCTL Inc.

File Name: [1. 5.3G 802.11 Body.da53:1](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KDX**

Communication System: UID 0, 5GWLAN (0); Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5260$  MHz;  $\sigma = 4.759$  S/m;  $\epsilon_r = 35.145$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928;ConvF(4.94, 4.94, 4.94) @ 5260 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 2/802.11 a\_WLAN2\_CH52\_Left\_4 mm Sensor Off/Area Scan (9x14x1):**

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.07 W/kg

**Configuration 2/802.11 a\_WLAN2\_CH52\_Left\_4 mm Sensor Off/Zoom Scan (9x9x7)/Cube 0:**

Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 16.90 V/m; Power Drift = -0.05 dB

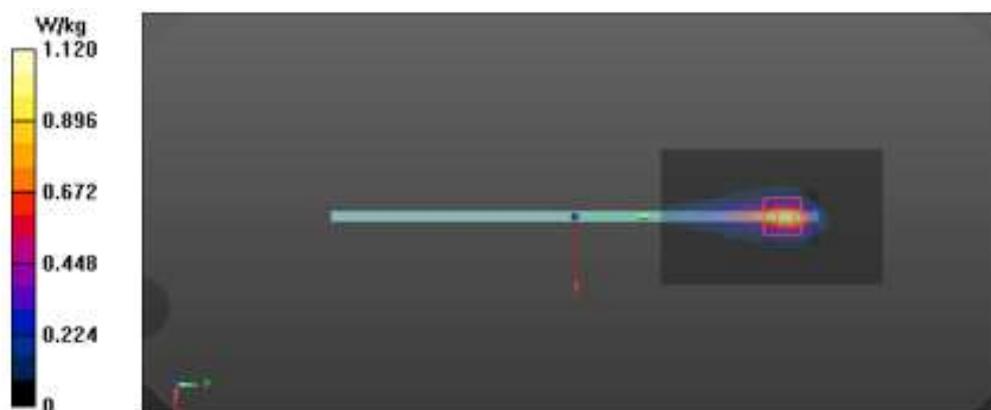
Peak SAR (extrapolated) = 1.96 W/kg

**SAR(1 g) = 0.453 W/kg; SAR(10 g) = 0.141 W/kg**

Smallest distance from peaks to all points 3 dB below = 6.4 mm

Ratio of SAR at M2 to SAR at M1 = 61.5%

Maximum value of SAR (measured) = 1.12 W/kg



18)

Date: 2020-06-06

Test Laboratory: KCTL Inc.

File Name: [1. 5.6G 802.11 Body.da53:1](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KDX**

Communication System: UID 0, 5G WLAN (0); Frequency: 5670 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5670$  MHz;  $\sigma = 5.215$  S/m;  $\epsilon_r = 34.66$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(4.69, 4.69, 4.69) @ 5670 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 2/802.11 n\_HT40\_WLAN1\_CH134\_Right\_7 mm Sensor Off re/Area Scan****(9x14x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 2.12 W/kg

**Configuration 2/802.11 n\_HT40\_WLAN1\_CH134\_Right\_7 mm Sensor Off re/Zoom Scan****(8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 21.79 V/m; Power Drift = -0.19 dB

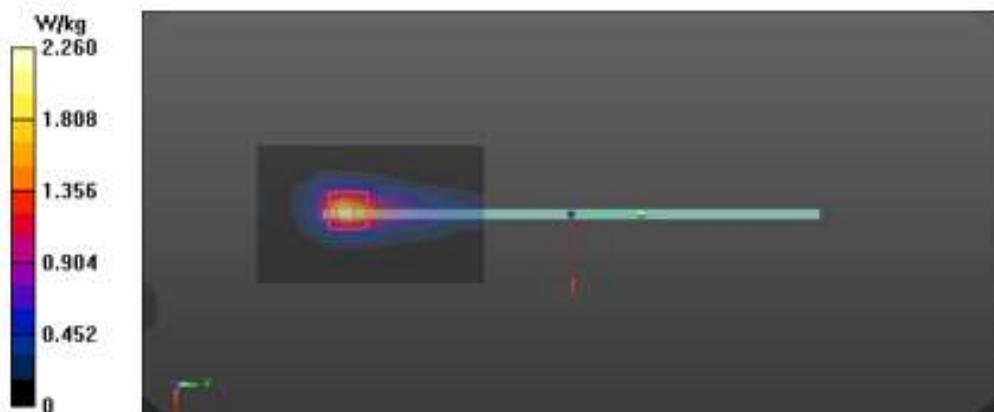
Peak SAR (extrapolated) = 3.98 W/kg

**SAR(1 g) = 0.937 W/kg; SAR(10 g) = 0.328 W/kg**

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

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

Maximum value of SAR (measured) = 2.26 W/kg



19)

Date: 2020-06-06

Test Laboratory: KCTL Inc.

File Name: [1. 5.6G 802.11 Body.da53:1](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KDX**

Communication System: UID 0, 5GWLAN (0); Frequency: 5670 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5670$  MHz;  $\sigma = 5.215$  S/m;  $\epsilon_r = 34.66$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928;ConvF(4.69, 4.69, 4.69) @ 5670 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 2/802.11 n\_HT40\_WLAN2\_CH134\_Left\_4 mm Sensor Off/Area Scan (9x14x1):**

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 2.45 W/kg

**Configuration 2/802.11 n\_HT40\_WLAN2\_CH134\_Left\_4 mm Sensor Off/Zoom Scan****(9x9x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 24.77 V/m; Power Drift = -0.01 dB

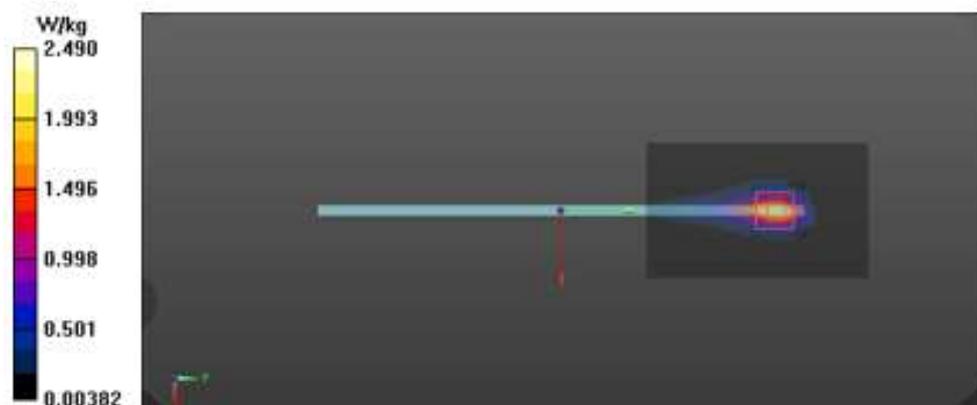
Peak SAR (extrapolated) = 4.62 W/kg

**SAR(1 g) = 0.999 W/kg; SAR(10 g) = 0.329 W/kg**

Smallest distance from peaks to all points 3 dB below = 6.4 mm

Ratio of SAR at M2 to SAR at M1 = 60.3%

Maximum value of SAR (measured) = 2.49 W/kg



20)

Date: 2020-06-08

Test Laboratory: KCTL Inc.

File Name: [1. 5.8G 802.11 Body.da53:1](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KDX**

Communication System: UID 0, 5GWLAN (0); Frequency: 5795 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 5795$  MHz;  $\sigma = 5.358$  S/m;  $\epsilon_r = 34.591$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928;ConvF(4.65, 4.65, 4.65) @ 5795 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 2/802.11 n\_HT40\_WLAN1\_CH159\_Right\_7 mm Sensor Off/Area Scan (9x14x1):** Measurement grid: dx=10mm, dy=10mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.81 W/kg

**Configuration 2/802.11 n\_HT40\_WLAN1\_CH159\_Right\_7 mm Sensor Off/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 11.64 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.37 W/kg

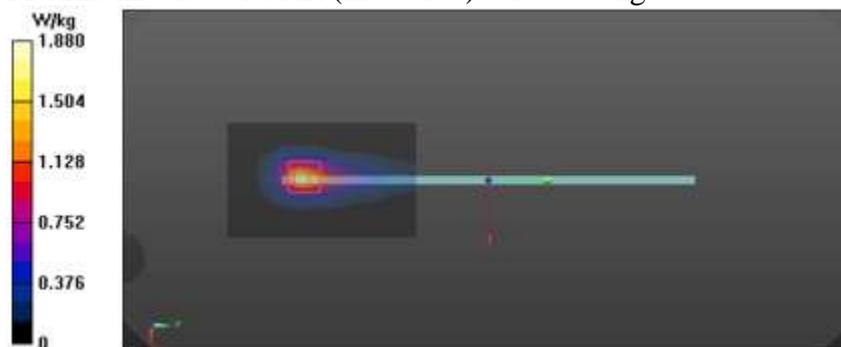
**SAR(1 g) = 0.778 W/kg; SAR(10 g) = 0.281 W/kg**

Smallest distance from peaks to all points 3 dB below = 8.8 mm

Ratio of SAR at M2 to SAR at M1 = 60.1%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.88 W/kg



21)

Date: 2020-06-08

Test Laboratory: KCTL Inc.

File Name: [1. 5.8G 802.11 Body.da53:1](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KDX**

Communication System: UID 0, 5GWLAN (0); Frequency: 5755 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 5755$  MHz;  $\sigma = 5.326$  S/m;  $\epsilon_r = 34.623$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928;ConvF(4.65, 4.65, 4.65) @ 5755 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 2/802.11 n\_HT40\_WLAN2\_CH151\_Left\_4 mm Sensor Off/Area Scan (9x14x1):**  
Measurement grid: dx=10mm, dy=10mm

Info: Interpolated medium parameters used for SAR evaluation.

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

**Configuration 2/802.11 n\_HT40\_WLAN2\_CH151\_Left\_4 mm Sensor Off/Zoom Scan (9x9x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 19.23 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 3.35 W/kg

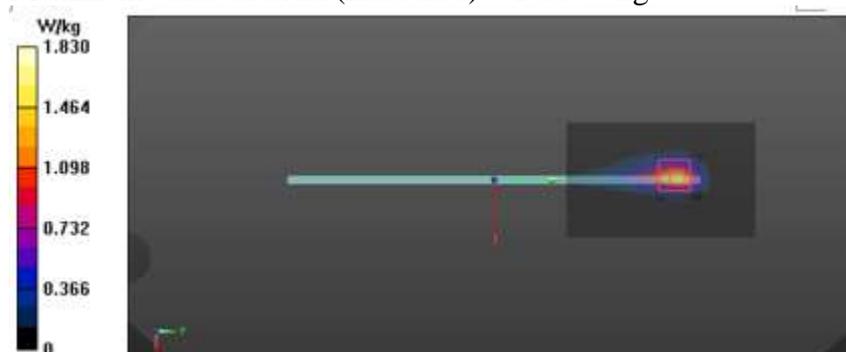
**SAR(1 g) = 0.710 W/kg; SAR(10 g) = 0.224 W/kg**

Smallest distance from peaks to all points 3 dB below = 6.4 mm

Ratio of SAR at M2 to SAR at M1 = 58.9%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.83 W/kg



22)

Date: 2020-06-22

Test Laboratory: KCTL Inc.

File Name: [2.Bluetooth\\_GFSK\\_DH5\\_Body\\_Volume\\_Scan\\_Right.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N400EXHN**

Communication System: UID 0, Bluetooth (0); Frequency: 2402 MHz; Duty Cycle: 1:1.30167  
Medium parameters used (interpolated):  $f = 2402$  MHz;  $\sigma = 1.719$  S/m;  $\epsilon_r = 39.057$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2402 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 2/Bluetooth\_GFSK\_DH5\_Ant.1\_CH0\_Right\_0 mm Sensor On/Area Scan (8x11x1):** Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.377 W/kg

**Configuration 2/Bluetooth\_GFSK\_DH5\_Ant.1\_CH0\_Right\_0 mm Sensor On/Zoom Scan (9x9x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 20.75 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.69 W/kg

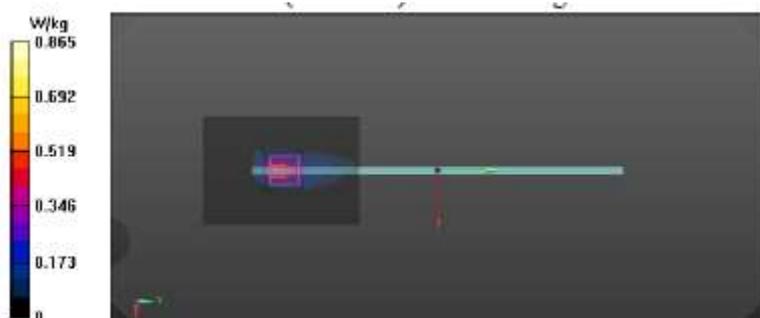
**SAR(1 g) = 0.384 W/kg; SAR(10 g) = 0.144 W/kg**

Smallest distance from peaks to all points 3 dB below = 5.1 mm

Ratio of SAR at M2 to SAR at M1 = 65.2%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.865 W/kg



23)

Date: 2020-06-21

Test Laboratory: KCTL Inc.

File Name: [4.Bluetooth\\_GFSK\\_DH5\\_Body\\_Volume\\_Scan\\_Rear.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N400EXHN**

Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz; Duty Cycle: 1:1.30167  
Medium parameters used (interpolated):  $f = 2441$  MHz;  $\sigma = 1.775$  S/m;  $\epsilon_r = 38.845$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2441 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/Bluetooth\_GFSK\_DH5\_Ant.2\_CH39\_Rear\_0 mm Sensor On/Area Scan (11x9x1):** Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.558 W/kg

**Configuration/Bluetooth\_GFSK\_DH5\_Ant.2\_CH39\_Rear\_0 mm Sensor On/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.49 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.09 W/kg

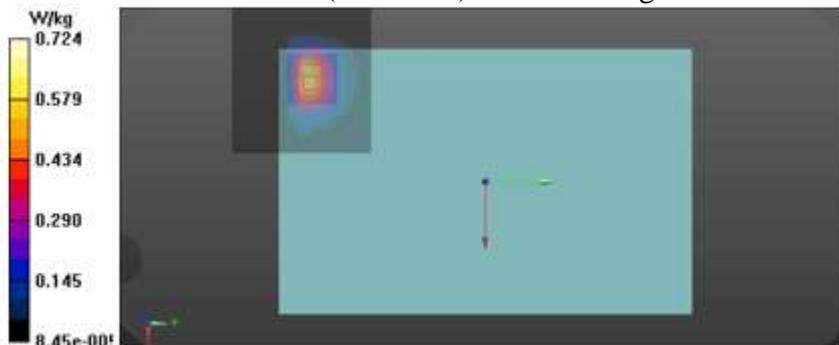
**SAR(1 g) = 0.418 W/kg; SAR(10 g) = 0.188 W/kg**

Smallest distance from peaks to all points 3 dB below = 7 mm

Ratio of SAR at M2 to SAR at M1 = 47%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.724 W/kg



## 19. Volume Scan Plot

Date: 2020-06-20

Test Laboratory: KCTL Inc.

File Name: [1.GSM850 Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500LL4B**Communication System: UID 0, GSM850\_2TX (0); Frequency: 848.8 MHz; Duty Cycle:  
1:4.14954Medium parameters used:  $f = 848.8$  MHz;  $\sigma = 0.92$  S/m;  $\epsilon_r = 41.46$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 848.8 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/GSM850\_GPRS 2Tx\_CH251\_Rear\_0 mm Grip Sensor On\_VS/Volume Scan**

(61x20x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

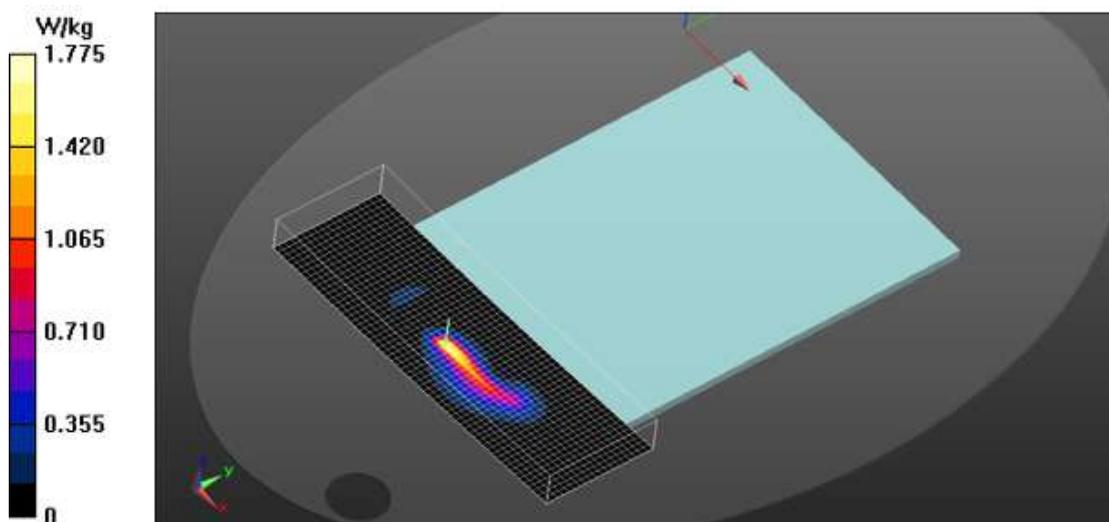
Reference Value = 28.33 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 5.19 W/kg

**SAR(1 g) = 0.718 W/kg; SAR(10 g) = 0.315 W/kg**

Total Absorbed Power = 0.0194 W

Maximum value of SAR (measured) = 1.78 W/kg



Date: 2020-06-09

Test Laboratory: KCTL Inc.

File Name: [1.GSM1900 Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KAR**Communication System: UID 0, GSM 1900\_2Tx (0); Frequency: 1880 MHz; Duty Cycle:  
1:4.14954Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.407$  S/m;  $\epsilon_r = 39.33$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1880 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/GSM1900\_GPRS 2Tx\_CH661\_Rear\_0 mm Grip Sensor On\_VS/Volume Scan****(61x26x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

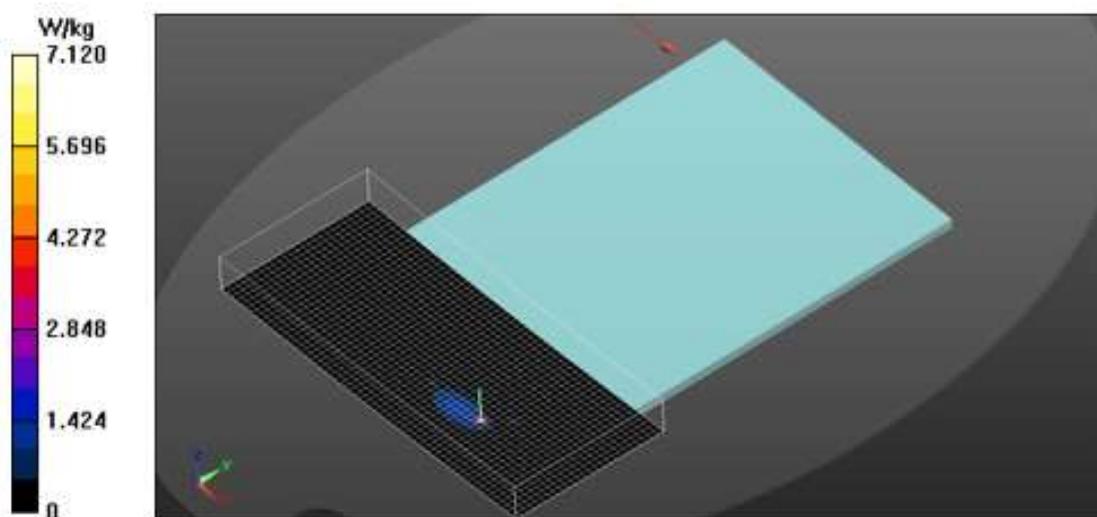
Reference Value = 30.72 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 8.99 W/kg

**SAR(1 g) = 0.877 W/kg; SAR(10 g) = 0.308 W/kg**

Total Absorbed Power = 0.0100 W

Maximum value of SAR (measured) = 7.12 W/kg



Date: 2020-06-06

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 2 QPSK 20 MHz Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006K8K**

Communication System: UID 0, LTE Band 2 (0); Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.395$  S/m;  $\epsilon_r = 39.313$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1880 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/LTE Band 2\_QPSK\_20 MHz\_1RB\_0offset\_CH18900\_Rear\_0 mm Grip Sensor****On VS/Volume Scan (61x26x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

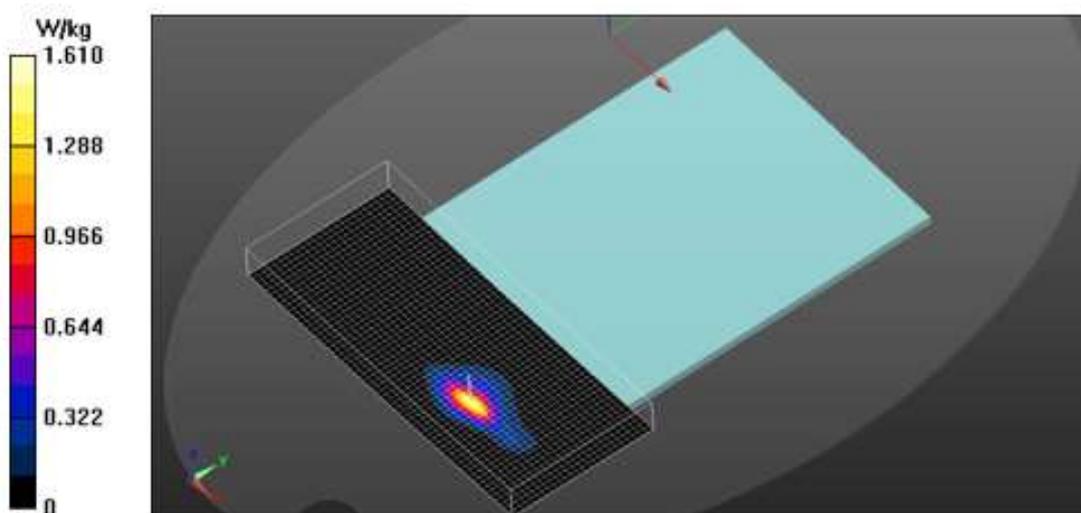
Reference Value = 33.96 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 2.73 W/kg

**SAR(1 g) = 0.756 W/kg; SAR(10 g) = 0.312 W/kg**

Total Absorbed Power = 0.0110 W

Maximum value of SAR (measured) = 1.61 W/kg



Date: 2020-06-17

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 5 QPSK 10 MHz Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500LL4B**

Communication System: UID 0, LTE Band 5 (0); Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 0.894$  S/m;  $\epsilon_r = 40.675$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

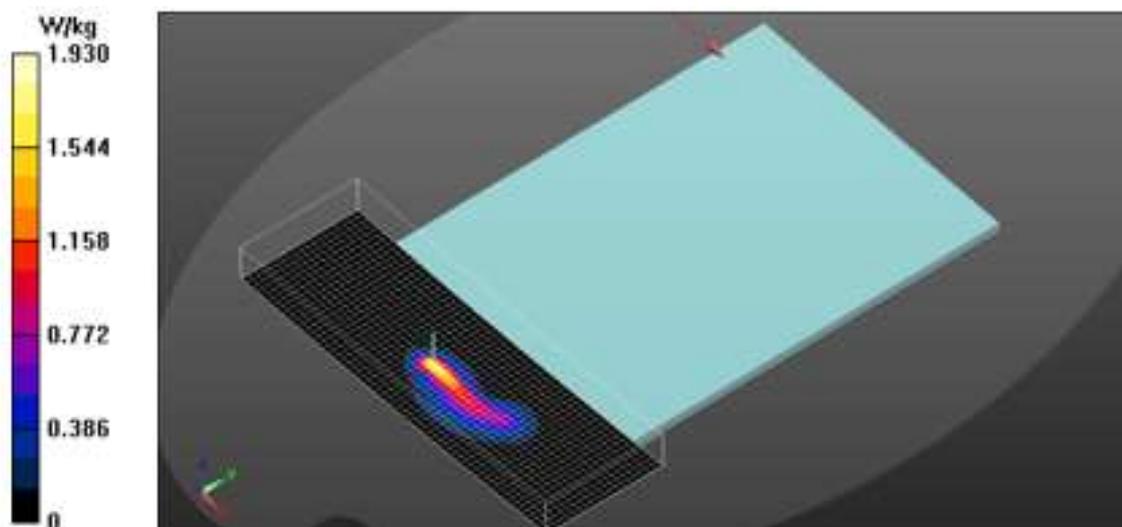
DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 836.5 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/LTE Band 5\_QPSK\_10 MHz\_25RB\_25offset\_CH20525\_Rear\_0 mm Grip  
Sensor On\_VS/Volume Scan (61x20x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 31.31 V/m; Power Drift = -0.16 dB  
Peak SAR (extrapolated) = 5.90 W/kg  
**SAR(1 g) = 0.733 W/kg; SAR(10 g) = 0.307 W/kg**  
Total Absorbed Power = 0.0176 W

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.93 W/kg



Date: 2020-06-22

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 12 QPSK 10 MHz Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500LL4B**

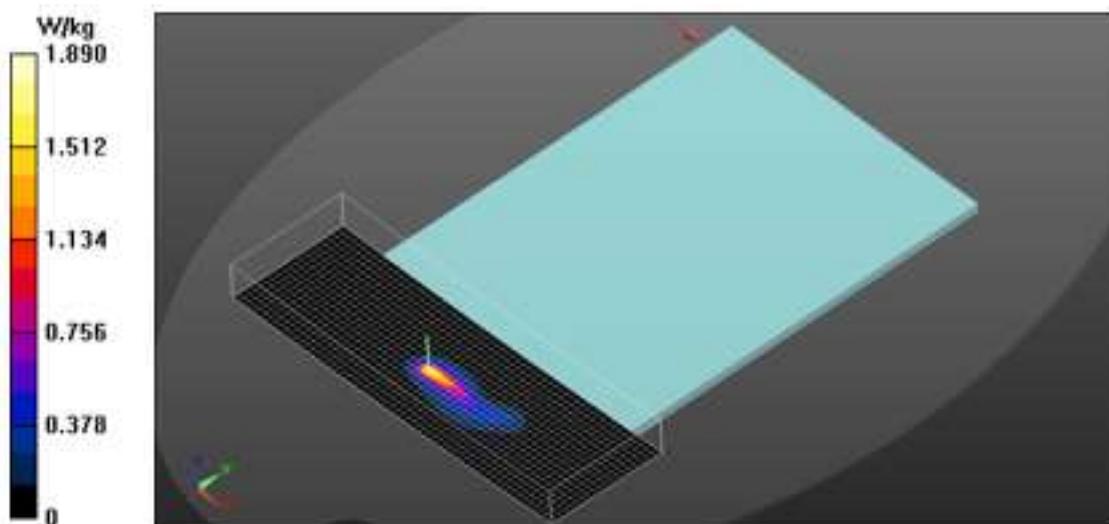
Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 707.5$  MHz;  $\sigma = 0.878$  S/m;  $\epsilon_r = 43.293$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.45, 10.45, 10.45) @ 707.5 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/LTE Band 12\_QPSK\_10 MHz\_25RB\_12offset\_CH23095\_Rear\_0 mm Grip Sensor On\_VS/Volume Scan (61x20x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 20.86 V/m; Power Drift = -0.08 dB  
Peak SAR (extrapolated) = 7.40 W/kg  
**SAR(1 g) = 0.649 W/kg; SAR(10 g) = 0.218 W/kg**  
Total Absorbed Power = 0.0110 W

Maximum value of SAR (measured) = 1.89 W/kg



Date: 2020-06-21

Test Laboratory: KCTL Inc.

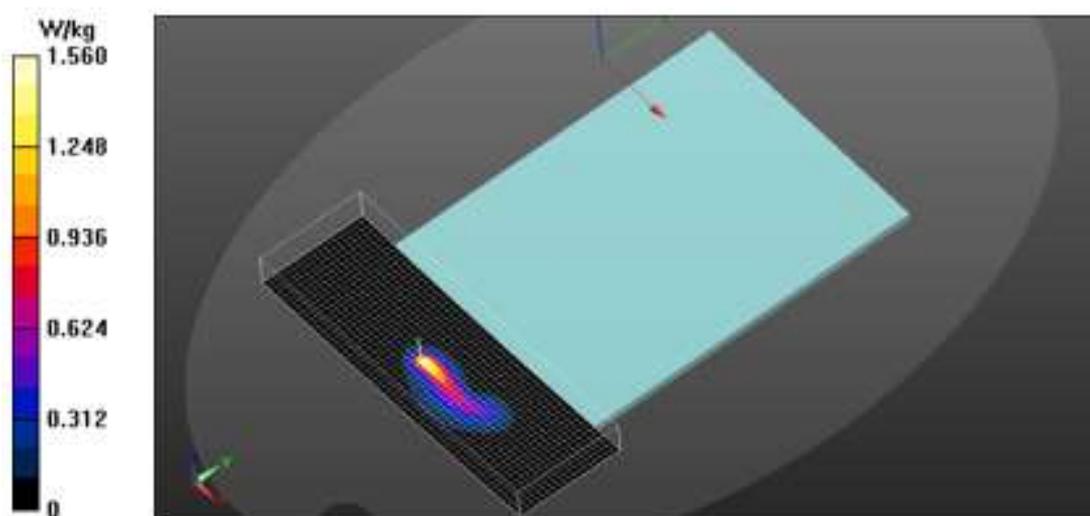
File Name: [1.LTE Band 13 QPSK 10 MHz Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500LL4B**

Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 782 \text{ MHz}$ ;  $\sigma = 0.905 \text{ S/m}$ ;  $\epsilon_r = 42.745$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.45, 10.45, 10.45) @ 782 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/LTE Band 13\_QPSK\_10 MHz\_25RB\_12offset\_CH23230\_Rear\_0 mm Grip Sensor On\_VS/Volume Scan (61x20x7):** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=1.4\text{mm}$   
Reference Value = 23.21 V/m; Power Drift = 0.14 dB  
Peak SAR (extrapolated) = 5.49 W/kg  
**SAR(1 g) = 0.613 W/kg; SAR(10 g) = 0.232 W/kg**  
Total Absorbed Power = 0.0133 W  
Maximum value of SAR (measured) = 1.56 W/kg



Date: 2020-06-07

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 25 QPSK 20 MHz Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KAR**Communication System: UID 0, LTE Band 25 (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1882.5$  MHz;  $\sigma = 1.389$  S/m;  $\epsilon_r = 39.494$ ;  $\rho = 1000$  kg/m<sup>3</sup>

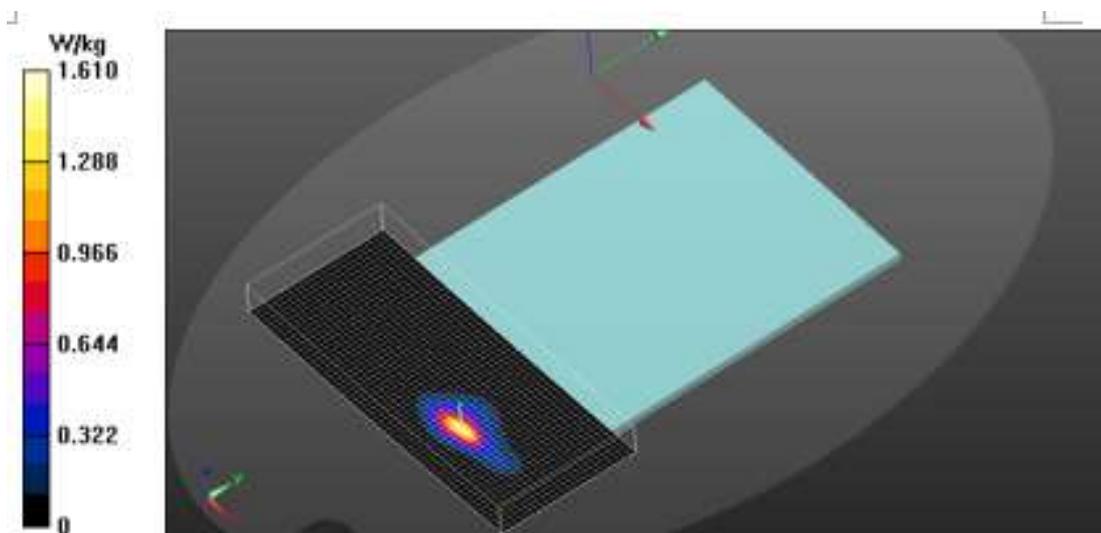
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1882.5 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/LTE Band 25 QPSK 20 MHz 50RB 24offset CH26365 Rear 0 mm Grip Sensor On\_VS/Volume Scan (61x26x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 30.23 V/m; Power Drift = -0.02 dB  
Peak SAR (extrapolated) = 2.80 W/kg  
**SAR(1 g) = 0.760 W/kg; SAR(10 g) = 0.313 W/kg**  
Total Absorbed Power = 0.0111 W**Info: Interpolated medium parameters used for SAR evaluation.**

Maximum value of SAR (measured) = 1.61 W/kg



Date: 2020-06-18

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 26 QPSK 15 MHz Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500MC6D**Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 831.5$  MHz;  $\sigma = 0.884$  S/m;  $\epsilon_r = 40.811$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 831.5 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/LTE Band 26\_QPSK\_15 MHz\_1RB\_0offset\_CH26865\_Top\_0 mm Grip Sensor On\_VS/Volume Scan (61x20x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

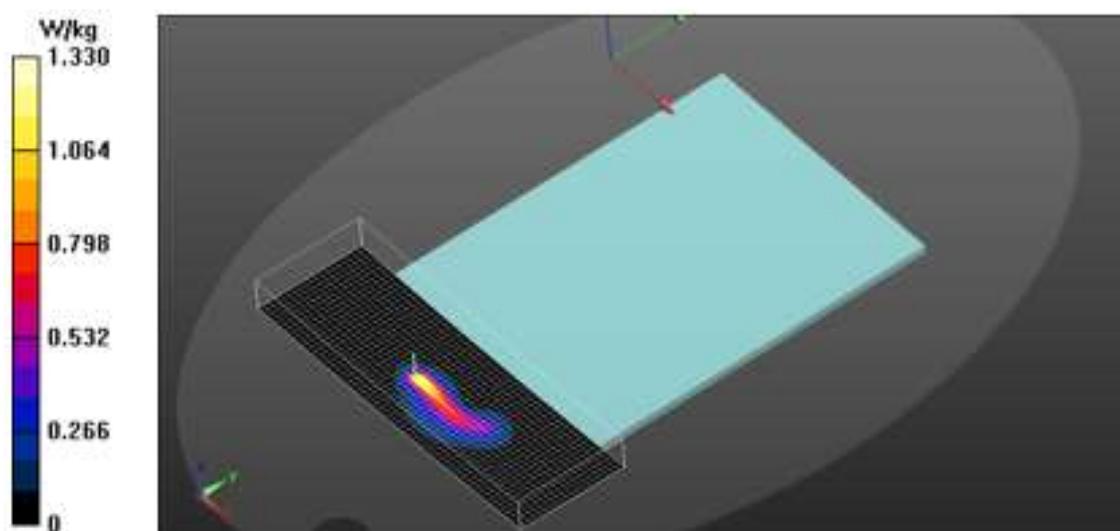
Reference Value = 27.17 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 4.76 W/kg

**SAR(1 g) = 0.557 W/kg; SAR(10 g) = 0.226 W/kg**

Total Absorbed Power = 0.0130 W

Maximum value of SAR (measured) = 1.33 W/kg



Date: 2020-05-08

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 41 QPSK 20 MHz Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KAR**

Communication System: UID 0, LTE Band41 (0); Frequency: 2593 MHz; Duty Cycle: 1:1.58016  
Medium parameters used (interpolated):  $f = 2593$  MHz;  $\sigma = 1.948$  S/m;  $\epsilon_r = 38.612$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(7.68, 7.68, 7.68) @ 2593 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1342; Calibrated: 2019-05-23
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/LTE Band 41\_QPSK\_20 MHz\_50RB\_24offset\_CH40620\_Rear\_0 mm Grip****Sensor On VS/Volume Scan (61x26x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 32.23 V/m; Power Drift = 0.00 dB

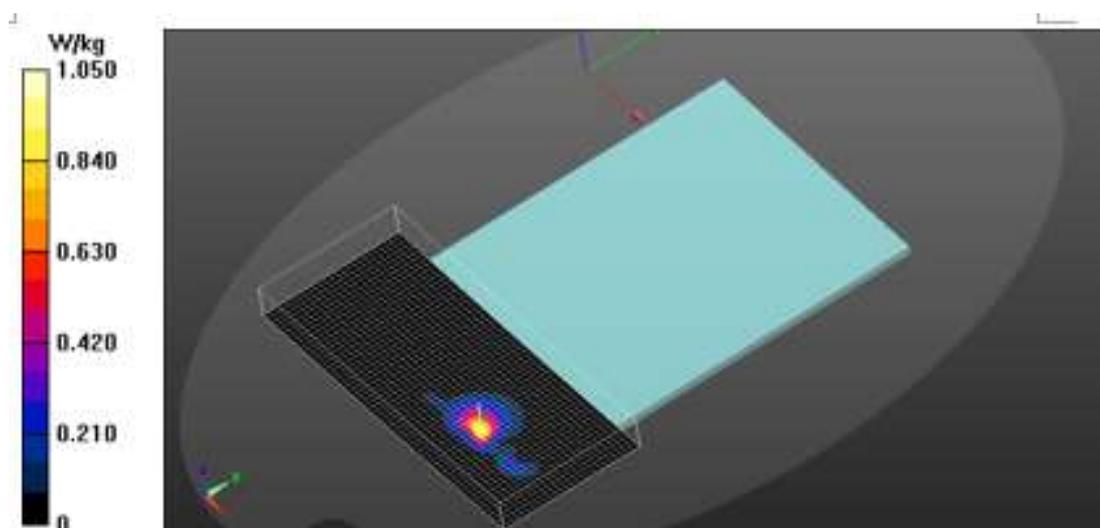
Peak SAR (extrapolated) = 1.69 W/kg

**SAR(1 g) = 0.534 W/kg; SAR(10 g) = 0.217 W/kg**

Total Absorbed Power = 0.00587 W

**Info: Interpolated medium parameters used for SAR evaluation.**

Maximum value of SAR (measured) = 1.05 W/kg



Date: 2020-06-08

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 66 QPSK 20 MHz Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006K8K**

Communication System: UID 0, LTE Band 66 (0); Frequency: 1770 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1770$  MHz;  $\sigma = 1.365$  S/m;  $\epsilon_r = 39.061$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(9.01, 9.01, 9.01) @ 1770 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/LTE Band 66\_QPSK\_20 MHz\_50RB\_24offset\_CH132572\_Rear\_0 mm Grip****Sensor On\_VS/Volume Scan (61x26x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

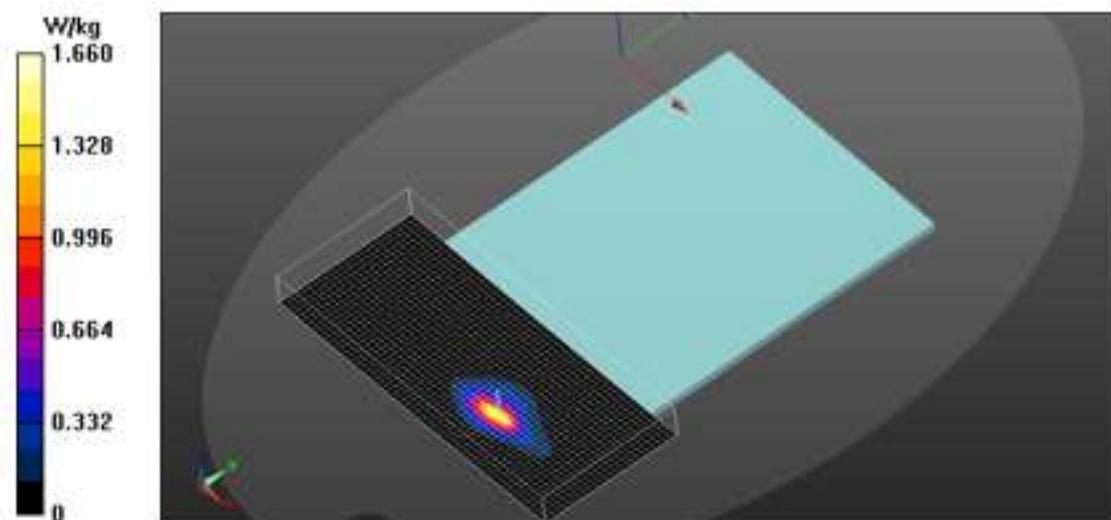
Reference Value = 33.87 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 2.88 W/kg

**SAR(1 g) = 0.775 W/kg; SAR(10 g) = 0.320 W/kg**

Total Absorbed Power = 0.0114 W

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



Date: 2020-06-09

Test Laboratory: KCTL Inc.

File Name: [1.WCDMA FDD II Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KAR**

Communication System: UID 0, W-CDMA 1900 (Band 2) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.407$  S/m;  $\epsilon_r = 39.33$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1880 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/WCDMA FDD II\_CH9400\_Rear\_0 mm Grip Sensor On\_VS/Volume Scan****(61x26x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

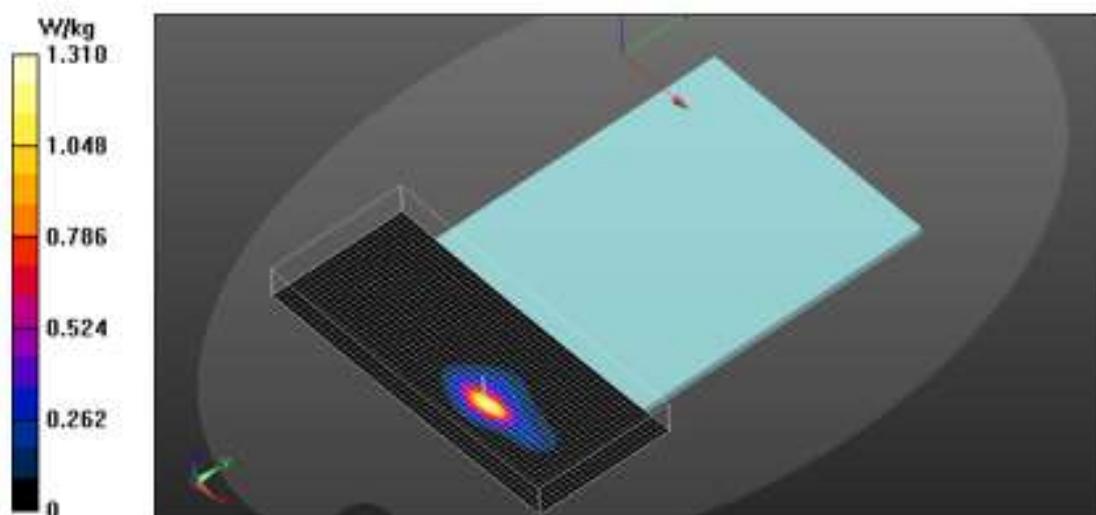
Reference Value = 28.73 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 2.11 W/kg

**SAR(1 g) = 0.635 W/kg; SAR(10 g) = 0.263 W/kg**

Total Absorbed Power = 0.0102 W

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



Date: 2020-06-10

Test Laboratory: KCTL Inc.

File Name: [1.WCDMA FDD IV Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KAR**

Communication System: UID 0, W-CDMA 1700 (Band4) (0); Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1732.4$  MHz;  $\sigma = 1.357$  S/m;  $\epsilon_r = 39.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(9.01, 9.01, 9.01) @ 1732.4 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/WCDMA FDD IV\_CH1412\_Rear\_0 mm Grip Sensor On/Volume Scan**

(61x26x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

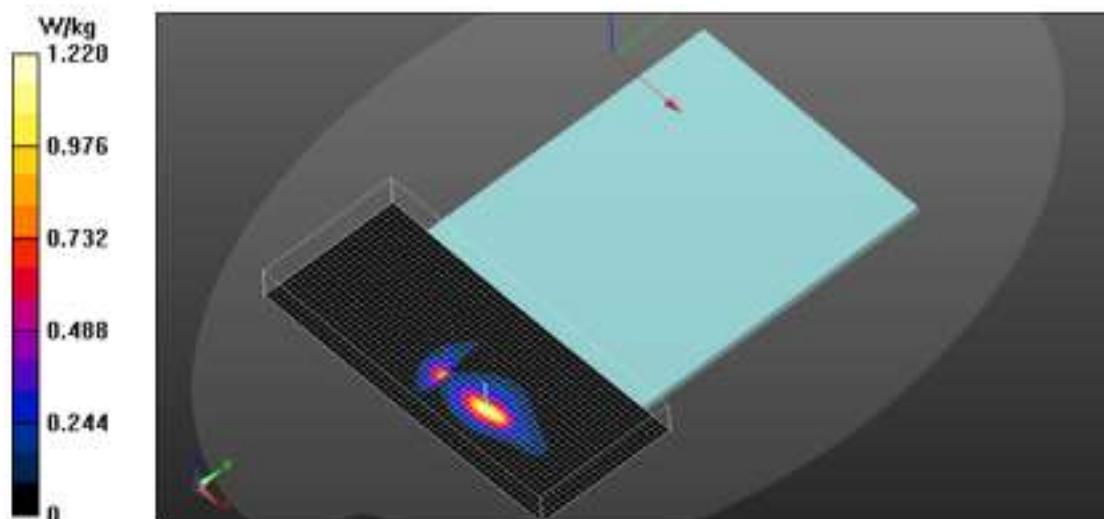
Reference Value = 30.63 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 2.15 W/kg

**SAR(1 g) = 0.587 W/kg; SAR(10 g) = 0.245 W/kg**

Total Absorbed Power = 0.0113 W

Maximum value of SAR (measured) = 1.22 W/kg



Date: 2020-06-19

Test Laboratory: KCTL Inc.

File Name: [1.WCDMA FDD V Body Rear VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500LL4B**

Communication System: UID 0, W-CDMA 850 (Band 5) (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.897$  S/m;  $\epsilon_r = 40.935$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 836.6 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/WCDMA FDD V\_CH4183\_Rear\_0 mm Grip Sensor On\_VS/Volume Scan****(61x20x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

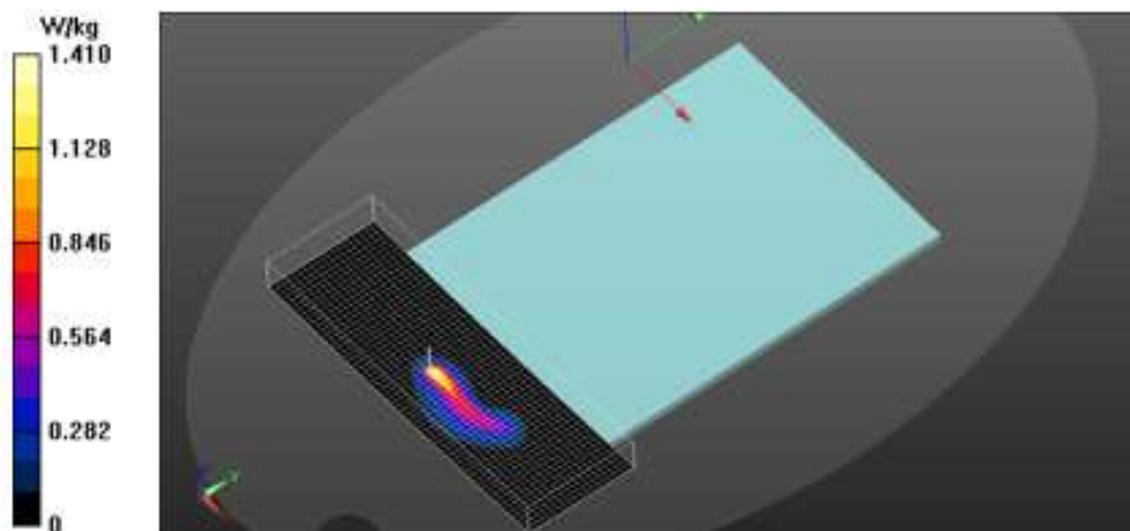
Reference Value = 28.13 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 5.12 W/kg

**SAR(1 g) = 0.554 W/kg; SAR(10 g) = 0.216 W/kg**

Total Absorbed Power = 0.0123 W

Maximum value of SAR (measured) = 1.41 W/kg



Date: 2020-05-26

Test Laboratory: KCTL Inc.

File Name: [2. 2.4G 802.11 Body Back-off Volume Scan WLAN2 Rear.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KDX**Communication System: UID 0, 2.4GWLAN (0); Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.743$  S/m;  $\epsilon_r = 40.068$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2412 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/802.11 b\_WLAN2\_CH1\_Rear\_0 mm Sensor On VS/Volume Scan (61x26x7):**

Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

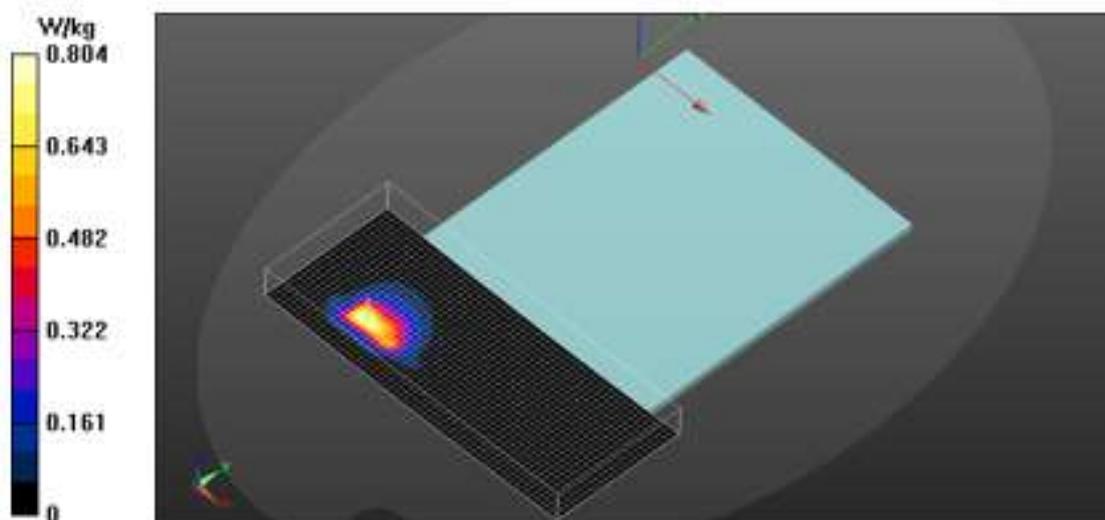
Reference Value = 18.44 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.18 W/kg

**SAR(1 g) = 0.494 W/kg; SAR(10 g) = 0.238 W/kg**

Total Absorbed Power = 0.0149 W

Maximum value of SAR (measured) = 0.804 W/kg



Date: 2020-05-26

Test Laboratory: KCTL Inc.

File Name: [3. 2.4G 802.11 Body Back-off Volume Scan MIMO Rear.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KDX**Communication System: UID 0, 2.4G WLAN (0); Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.794$  S/m;  $\epsilon_r = 39.93$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2462 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/802.11 b\_MIMO\_CH11\_Rear\_0 mm Sensor On VS/Volume Scan (61x26x7):**

Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

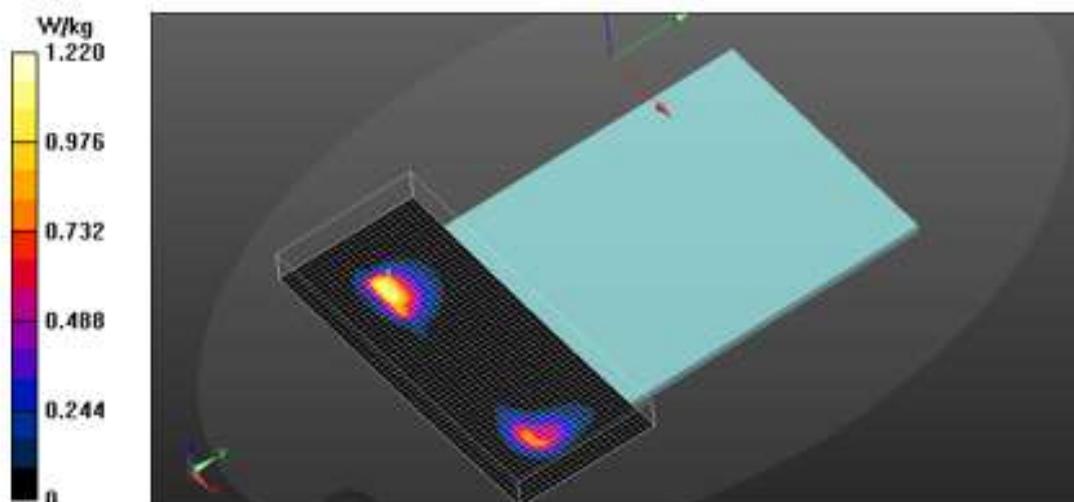
Reference Value = 21.80 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.98 W/kg

**SAR(1 g) = 0.704 W/kg; SAR(10 g) = 0.321 W/kg**

Total Absorbed Power = 0.0232 W

Maximum value of SAR (measured) = 1.22 W/kg



Date: 2020-06-18

Test Laboratory: KCTL Inc.

File Name: [4. 5.6G 802.11 Body Back-off Volume Scan WLAN1 Rear.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KDX**

Communication System: UID 0, 5GWLAN (0); Frequency: 5610 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 5610$  MHz;  $\sigma = 4.993$  S/m;  $\epsilon_r = 35.112$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(4.69, 4.69, 4.69) @ 5610 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/802.11 ac\_VHT80\_WLAN1\_CH122\_Rear\_0 mm Sensor On/Volume Scan****(61x20x7):** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 11.03 V/m; Power Drift = -0.16 dB

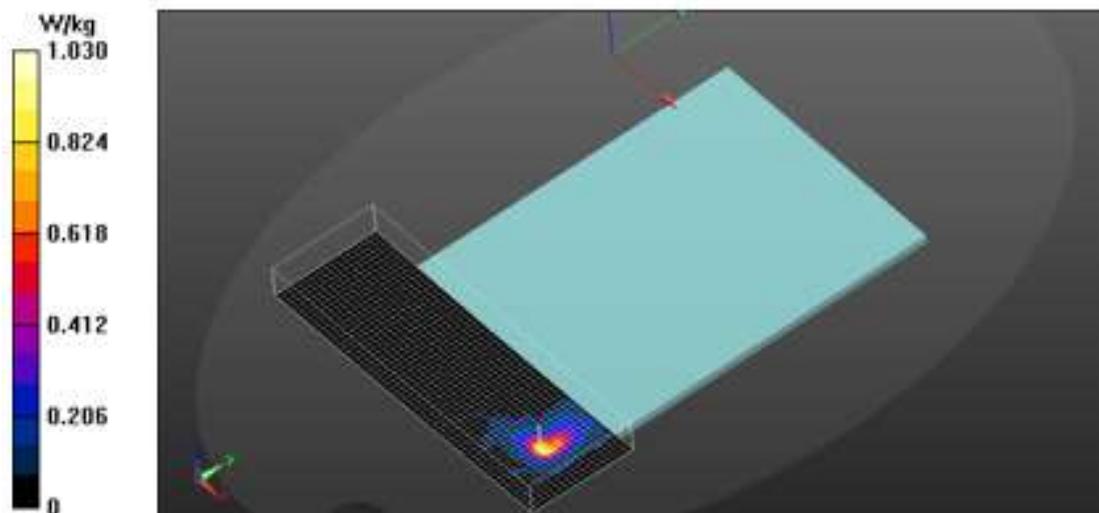
Peak SAR (extrapolated) = 3.08 W/kg

**SAR(1 g) = 0.411 W/kg; SAR(10 g) = 0.181 W/kg**

Total Absorbed Power = 0.0294 W

**Info: Interpolated medium parameters used for SAR evaluation.**

Maximum value of SAR (measured) = 1.03 W/kg



Date: 2020-06-20

Test Laboratory: KCTL Inc.

File Name: [5. 5.8G 802.11 Body Back-off Volume Scan WLAN2 Rear.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KDX**Communication System: UID 0, 5G WLAN (0); Frequency: 5775 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 5775$  MHz;  $\sigma = 5.11$  S/m;  $\epsilon_r = 35.809$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(4.65, 4.65, 4.65) @ 5775 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/802.11 ac\_VHT80\_WLAN2\_CH155\_Rear\_0 mm Sensor On/Volume Scan****(61x20x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

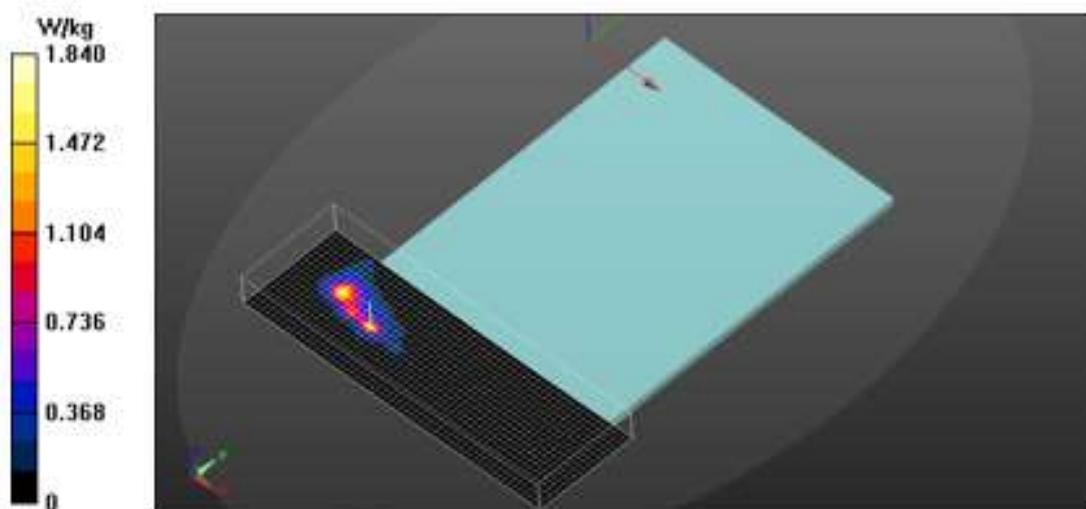
Reference Value = 16.01 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 6.38 W/kg

**SAR(1 g) = 0.638 W/kg; SAR(10 g) = 0.223 W/kg**

Total Absorbed Power = 0.0194 W

Maximum value of SAR (measured) = 1.84 W/kg



Date: 2020-06-22

Test Laboratory: KCTL Inc.

File Name: [6.Bluetooth\\_GFSK\\_DH5\\_Body\\_Volume\\_Scan\\_Ant.1\\_Rear.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N400EXHN**Communication System: UID 0, Bluetooth (0); Frequency: 2402 MHz; Duty Cycle: 1:1.30167  
Medium parameters used (interpolated):  $f = 2402$  MHz;  $\sigma = 1.719$  S/m;  $\epsilon_r = 39.057$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2402 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/Bluetooth\_GFSK\_DH5\_Ant.1\_CH0\_Rear\_0 mm Sensor On/Volume Scan****(66x26x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 23.46 V/m; Power Drift = 0.17 dB

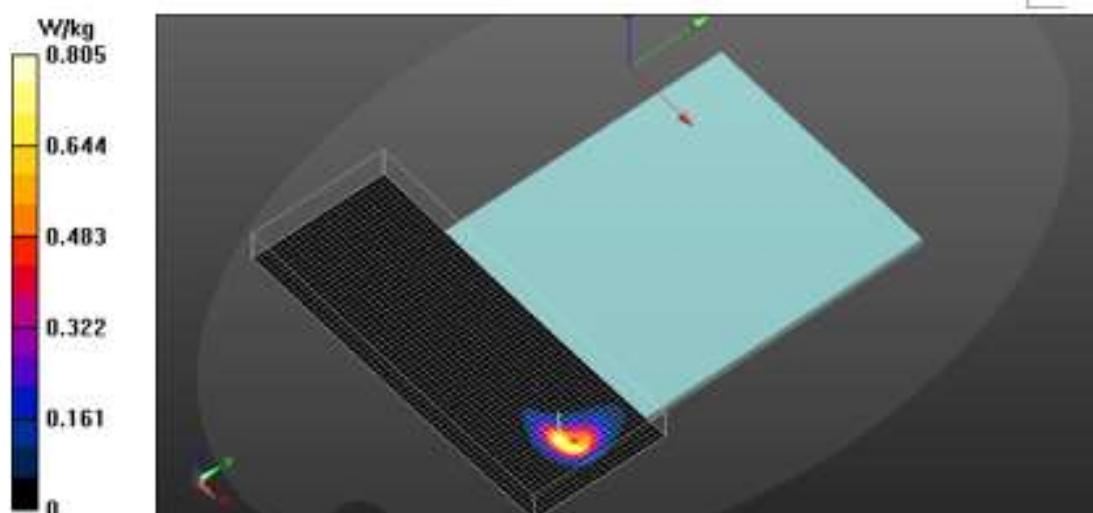
Peak SAR (extrapolated) = 1.38 W/kg

**SAR(1 g) = 0.376 W/kg; SAR(10 g) = 0.171 W/kg**

Total Absorbed Power = 0.00482 W

**Info: Interpolated medium parameters used for SAR evaluation.**

Maximum value of SAR (measured) = 0.805 W/kg



Date: 2020-06-17

Test Laboratory: KCTL Inc.

File Name: [7.Bluetooth\\_GFSK\\_DH5\\_Body\\_Volume\\_Scan\\_Ant.2\\_Rear.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N400EXHN**Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz; Duty Cycle: 1:1.30167  
Medium parameters used (interpolated):  $f = 2441$  MHz;  $\sigma = 1.775$  S/m;  $\epsilon_r = 38.845$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2441 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/Bluetooth\_GFSK\_DH5\_Ant.2\_CH39\_Rear\_0 mm Sensor On/Volume Scan****(66x26x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 19.49 V/m; Power Drift = 0.07 dB

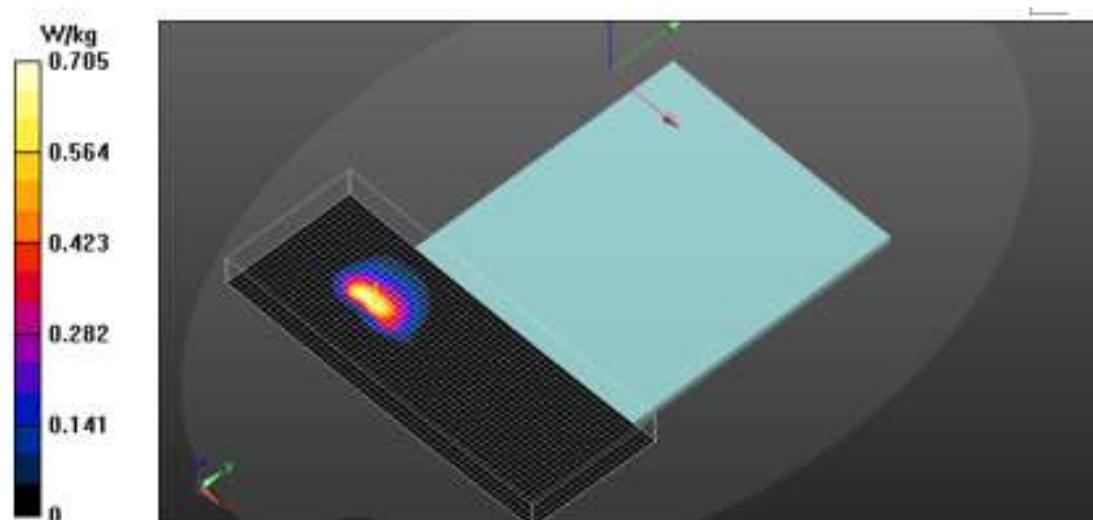
Peak SAR (extrapolated) = 1.05 W/kg

**SAR(1 g) = 0.402 W/kg; SAR(10 g) = 0.179 W/kg**

Total Absorbed Power = 0.00461 W

**Info: Interpolated medium parameters used for SAR evaluation.**

Maximum value of SAR (measured) = 0.705 W/kg



Date: 2020-06-20

Test Laboratory: KCTL Inc.

File Name: [1.GSM850 Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500MC6D**Communication System: UID 0, GSM850\_2TX (0); Frequency: 836.6 MHz; Duty Cycle:  
1:4.14954Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.907$  S/m;  $\epsilon_r = 41.606$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 836.6 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/GSM850\_GPRS 2Tx\_CH190\_Top\_0 mm Grip Sensor On\_VS/Volume Scan****(13x56x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

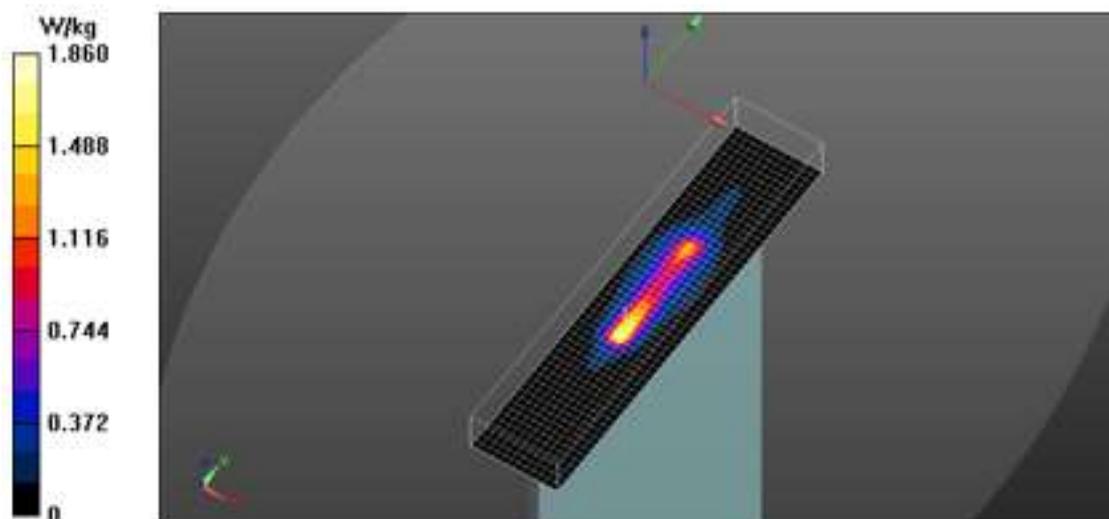
Reference Value = 40.52 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 6.38 W/kg

**SAR(1 g) = 0.755 W/kg; SAR(10 g) = 0.295 W/kg**

Total Absorbed Power = 0.0167 W

Maximum value of SAR (measured) = 1.86 W/kg



Date: 2020-06-12

Test Laboratory: KCTL Inc.

File Name: [1.GSM1900 Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KAR**Communication System: UID 0, GSM 1900\_2Tx (0); Frequency: 1880 MHz; Duty Cycle:  
1:4.14954Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.384$  S/m;  $\epsilon_r = 39.507$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1880 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/GSM1900\_GPRS 2Tx\_CH661\_Top\_0 mm Grip Sensor On\_VS/Volume Scan (13x56x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

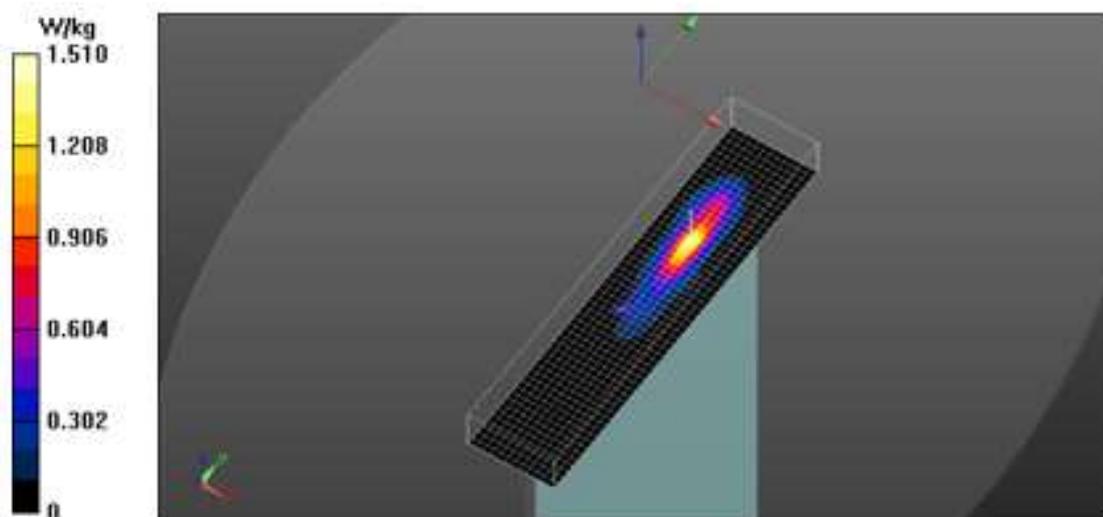
Reference Value = 15.37 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 2.46 W/kg

**SAR(1 g) = 0.667 W/kg; SAR(10 g) = 0.250 W/kg**

Total Absorbed Power = 0.00932 W

Maximum value of SAR (measured) = 1.51 W/kg



Date: 2020-06-11

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 2 QPSK 20 MHz Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006K8K**

Communication System: UID 0, LTE Band 2 (0); Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.403$  S/m;  $\epsilon_r = 40.169$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1900 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/LTE Band 2\_QPSK\_20 MHz\_50RB\_24offset\_CH19100\_Top\_0 mm Grip****Sensor On\_VS/Volume Scan (13x56x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

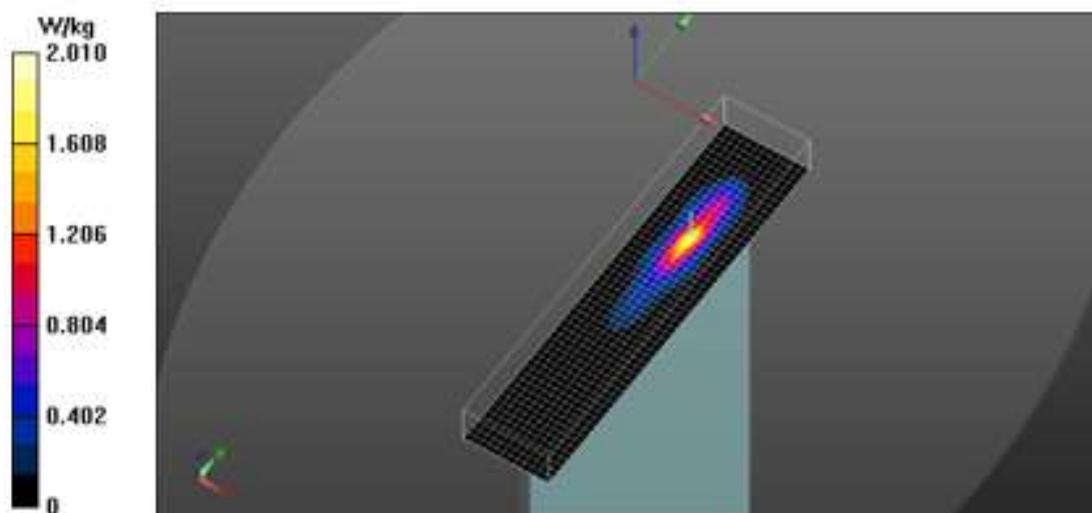
Reference Value = 16.08 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 3.76 W/kg

**SAR(1 g) = 0.811 W/kg; SAR(10 g) = 0.294 W/kg**

Total Absorbed Power = 0.0115 W

Maximum value of SAR (measured) = 2.01 W/kg



Date: 2020-06-17

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 5 QPSK 10 MHz Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500LL4B**

Communication System: UID 0, LTE Band 5 (0); Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 0.894$  S/m;  $\epsilon_r = 40.675$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

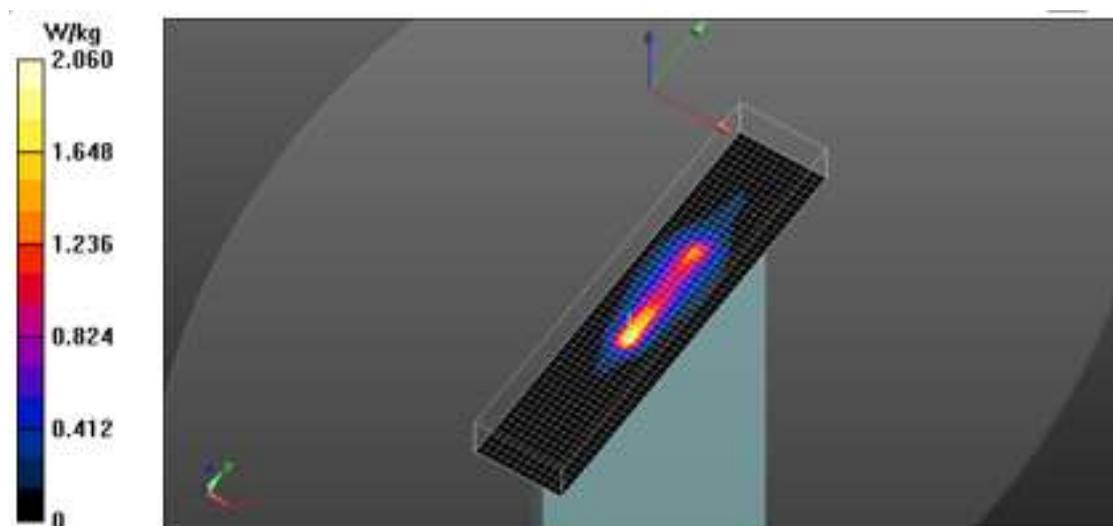
DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 836.5 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/LTE Band 5\_QPSK\_10 MHz\_50RB\_0offset\_CH20525\_Top\_0 mm Grip Sensor On\_VS/Volume Scan (13x56x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 43.04 V/m; Power Drift = 0.09 dB  
Peak SAR (extrapolated) = 6.32 W/kg  
**SAR(1 g) = 0.777 W/kg; SAR(10 g) = 0.318 W/kg**  
Total Absorbed Power = 0.0181 W

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.06 W/kg



Date: 2020-06-22

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 12 QPSK 10 MHz Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500LL4B**

Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 707.5$  MHz;  $\sigma = 0.878$  S/m;  $\epsilon_r = 43.293$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.45, 10.45, 10.45) @ 707.5 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/LTE Band 12\_QPSK\_10 MHz\_25RB\_12offset\_CH23230\_Top\_0 mm Grip  
Sensor On\_VS/Volume Scan (13x56x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

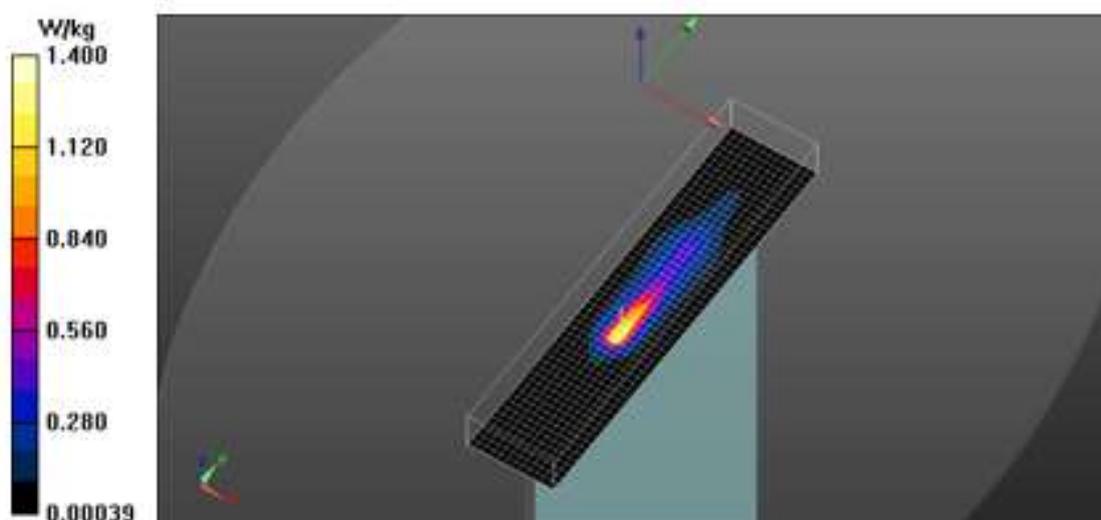
Reference Value = 36.36 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 4.38 W/kg

**SAR(1 g) = 0.553 W/kg; SAR(10 g) = 0.205 W/kg**

Total Absorbed Power = 0.0118 W

Maximum value of SAR (measured) = 1.40 W/kg



Date: 2020-06-21

Test Laboratory: KCTL Inc.

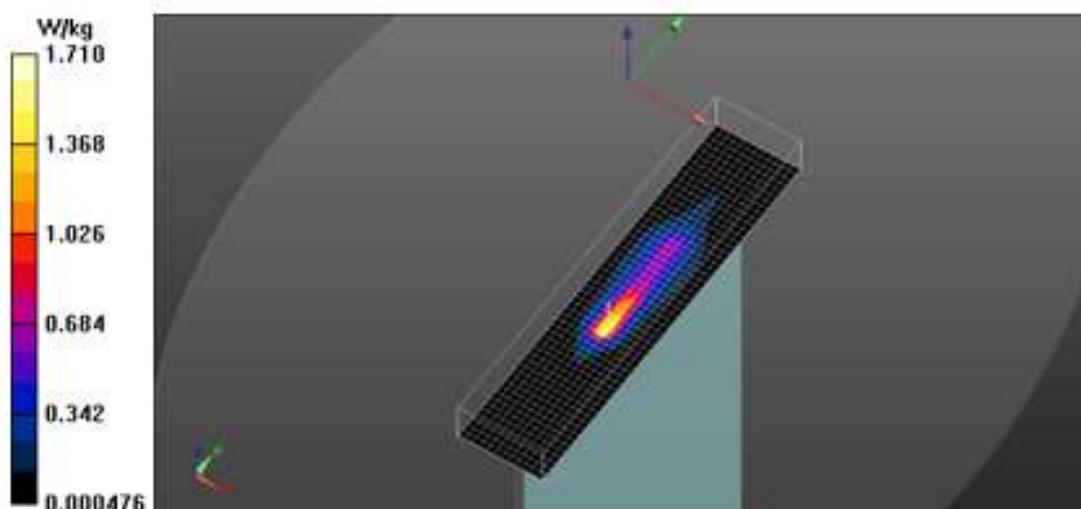
File Name: [1.LTE Band 13 QPSK 10 MHz Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500MC6D**

Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 782 \text{ MHz}$ ;  $\sigma = 0.905 \text{ S/m}$ ;  $\epsilon_r = 42.745$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.45, 10.45, 10.45) @ 782 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/LTE Band 13\_QPSK\_10 MHz\_50RB\_0offset\_CH23230\_Top\_0 mm Grip Sensor On\_VS/Volume Scan (13x56x7):** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=1.4\text{mm}$   
Reference Value = 38.47 V/m; Power Drift = -0.03 dB  
Peak SAR (extrapolated) = 5.33 W/kg  
**SAR(1 g) = 0.663 W/kg; SAR(10 g) = 0.249 W/kg**  
Total Absorbed Power = 0.0145 W  
Maximum value of SAR (measured) = 1.71 W/kg



Date: 2020-06-11

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 25 QPSK 20 MHz Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KAR**Communication System: UID 0, LTE Band 25 (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1882.5$  MHz;  $\sigma = 1.384$  S/m;  $\epsilon_r = 40.136$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1882.5 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/LTE Band 25\_QPSK\_20 MHz\_50RB\_24offset\_CH26365\_Top\_0 mm Grip Sensor On/Volume Scan (13x56x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 16.55 V/m; Power Drift = -0.07 dB

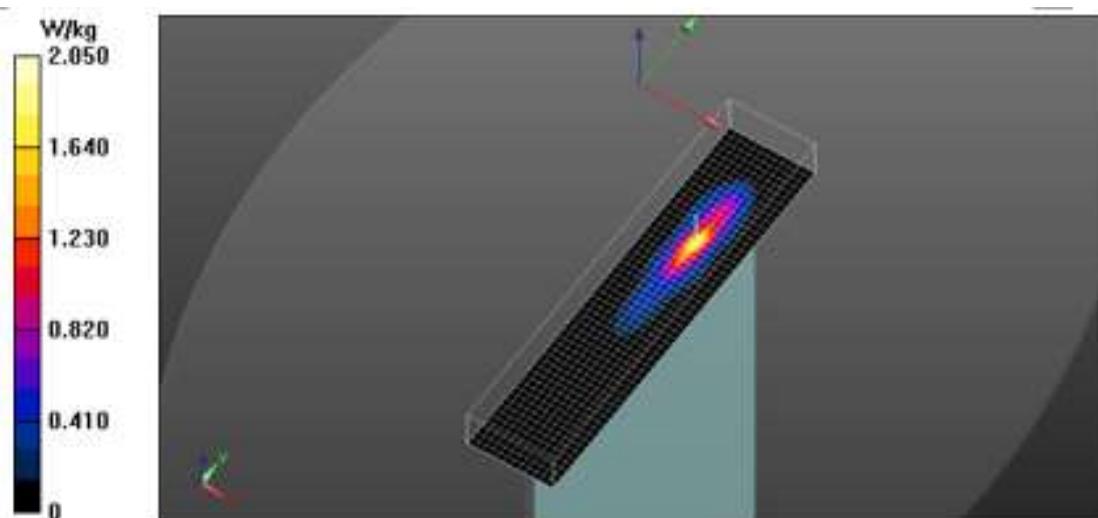
Peak SAR (extrapolated) = 3.82 W/kg

**SAR(1 g) = 0.834 W/kg; SAR(10 g) = 0.304 W/kg**

Total Absorbed Power = 0.0121 W

**Info: Interpolated medium parameters used for SAR evaluation.**

Maximum value of SAR (measured) = 2.05 W/kg



Date: 2020-06-18

Test Laboratory: KCTL Inc.

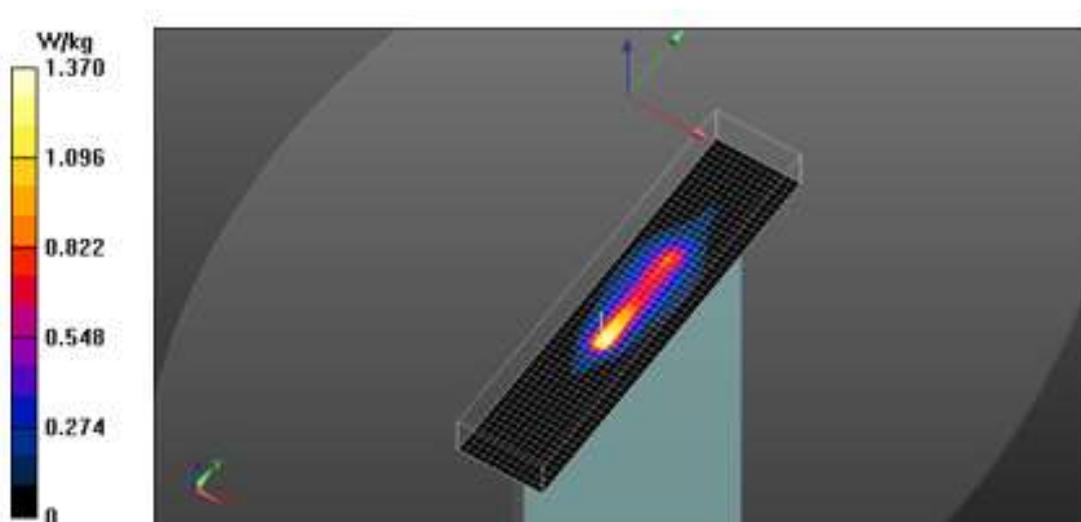
File Name: [1.LTE Band 26 QPSK 15 MHz Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500MC6D**

Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 831.5$  MHz;  $\sigma = 0.884$  S/m;  $\epsilon_r = 40.811$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 831.5 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/LTE Band 26\_QPSK\_15 MHz\_1RB\_0offset\_CH26865\_Top\_0 mm Grip Sensor On\_VS/Volume Scan (13x56x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 35.67 V/m; Power Drift = 0.19 dB  
Peak SAR (extrapolated) = 4.36 W/kg  
**SAR(1 g) = 0.579 W/kg; SAR(10 g) = 0.234 W/kg**  
Total Absorbed Power = 0.0133 W  
Maximum value of SAR (measured) = 1.37 W/kg



Date: 2020-06-13

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 41 QPSK 20 MHz Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KAR**

Communication System: UID 0, LTE Band41 (0); Frequency: 2506 MHz; Duty Cycle: 1:1.58016  
Medium parameters used (interpolated):  $f = 2506$  MHz;  $\sigma = 1.836$  S/m;  $\epsilon_r = 40.26$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(7.68, 7.68, 7.68) @ 2506 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/LTE Band 41\_QPSK\_20 MHz\_1RB\_0offset\_CH39750\_Top\_0 mm Grip****Sensor On/Volume Scan (13x56x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 10.18 V/m; Power Drift = -0.14 dB

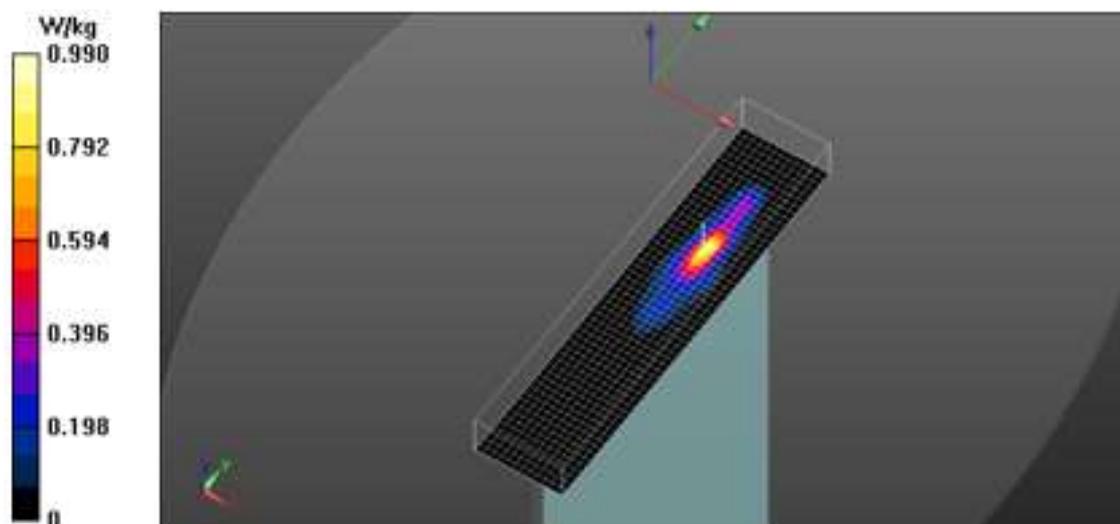
Peak SAR (extrapolated) = 1.81 W/kg

**SAR(1 g) = 0.430 W/kg; SAR(10 g) = 0.150 W/kg**

Total Absorbed Power = 0.00471 W

**Info: Interpolated medium parameters used for SAR evaluation.**

Maximum value of SAR (measured) = 0.990 W/kg



Date: 2020-06-10

Test Laboratory: KCTL Inc.

File Name: [1.LTE Band 66 QPSK 20 MHz Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006K8K**

Communication System: UID 0, LTE Band 66 (0); Frequency: 1770 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1770$  MHz;  $\sigma = 1.406$  S/m;  $\epsilon_r = 39.343$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(9.01, 9.01, 9.01) @ 1770 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/LTE Band 66\_QPSK\_20 MHz\_100RB\_0offset\_CH132572\_Top\_0 mm Grip****Sensor On/Volume Scan (13x56x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

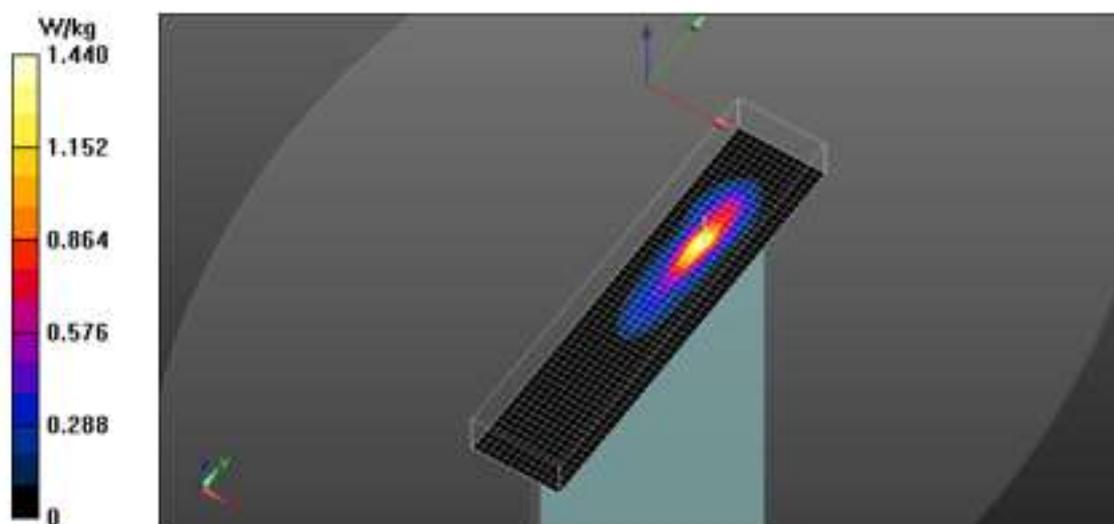
Reference Value = 16.20 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 2.72 W/kg

**SAR(1 g) = 0.681 W/kg; SAR(10 g) = 0.263 W/kg**

Total Absorbed Power = 0.0110 W

Maximum value of SAR (measured) = 1.44 W/kg



Date: 2020-06-12

Test Laboratory: KCTL Inc.

File Name: [1.WCDMA FDD II Body Top\\_VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KAR**

Communication System: UID 0, W-CDMA 1900 (Band 2) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.384$  S/m;  $\epsilon_r = 39.507$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(8.56, 8.56, 8.56) @ 1880 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/WCDMA FDD II\_CH9400\_Top\_0 mm Grip Sensor On\_VS/Volume Scan****(13x56x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

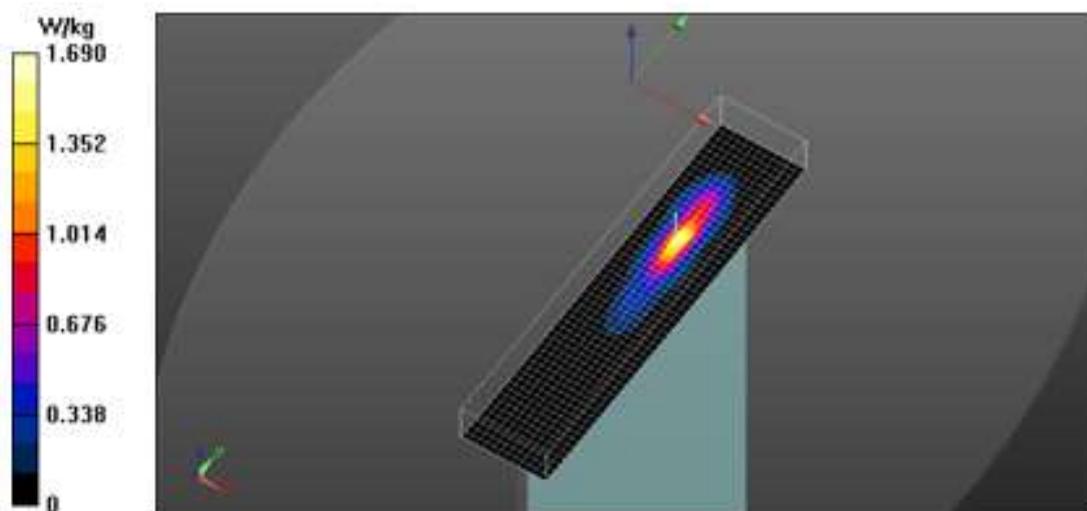
Reference Value = 16.27 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 3.29 W/kg

**SAR(1 g) = 0.757 W/kg; SAR(10 g) = 0.282 W/kg**

Total Absorbed Power = 0.0114 W

Maximum value of SAR (measured) = 1.69 W/kg



Date: 2020-06-10

Test Laboratory: KCTL Inc.

File Name: [1.WCDMA FDD IV Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006K9D**

Communication System: UID 0, W-CDMA 1700 (Band4) (0); Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1732.4$  MHz;  $\sigma = 1.357$  S/m;  $\epsilon_r = 39.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(9.01, 9.01, 9.01) @ 1732.4 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/WCDMA FDD IV\_CH1412\_Top\_0 mm Grip Sensor On/Volume Scan**

(13x56x7): Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

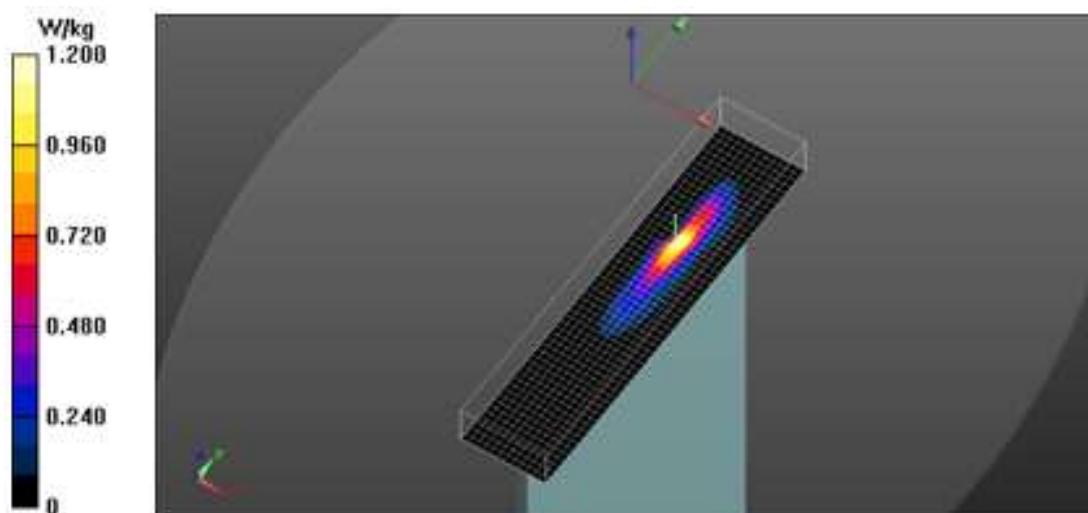
Reference Value = 6.621 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 2.99 W/kg

**SAR(1 g) = 0.552 W/kg; SAR(10 g) = 0.188 W/kg**

Total Absorbed Power = 0.00671 W

Maximum value of SAR (measured) = 1.20 W/kg



Date: 2020-06-19

Test Laboratory: KCTL Inc.

File Name: [1.WCDMA FDD V Body Top VS.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N500LL4B**

Communication System: UID 0, W-CDMA 850 (Band 5) (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.897$  S/m;  $\epsilon_r = 40.935$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3865; ConvF(10.07, 10.07, 10.07) @ 836.6 MHz; ; Calibrated: 2019-08-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1586; Calibrated: 2020-04-22
- Phantom: ELI v5.0 sn1178; Type: QDOVA002AA; Serial: TP:1178
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 3/WCDMA FDD V\_CH4183\_Top\_0 mm Grip Sensor On\_VS/Volume Scan****(13x56x7):** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

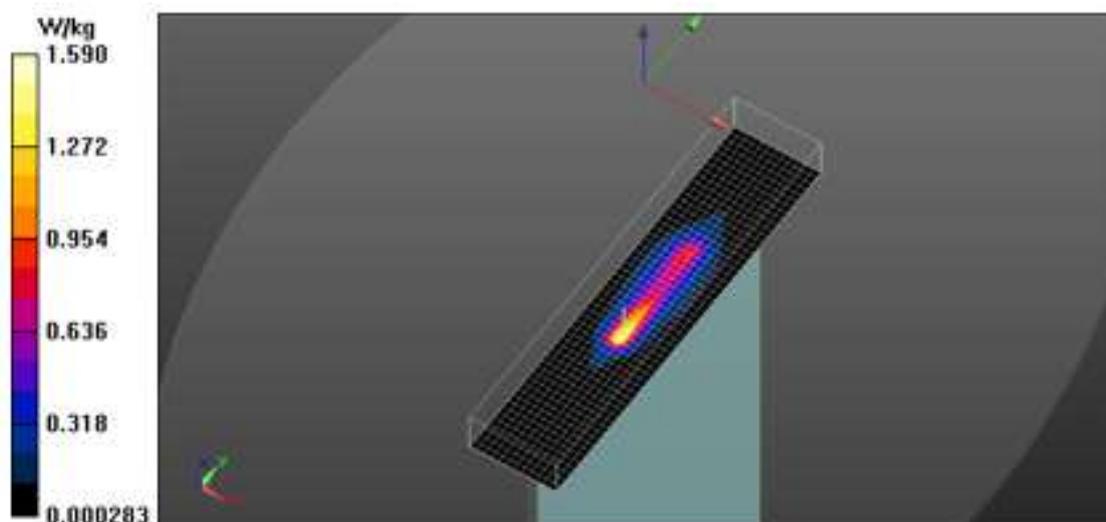
Reference Value = 36.99 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 4.97 W/kg

**SAR(1 g) = 0.613 W/kg; SAR(10 g) = 0.235 W/kg**

Total Absorbed Power = 0.0135 W

Maximum value of SAR (measured) = 1.59 W/kg



Date: 2020-05-26

Test Laboratory: KCTL Inc.

File Name: [2. 2.4G 802.11 Body Back-off Volume Scan Top WLAN2.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KDX**Communication System: UID 0, 2.4GWLAN (0); Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.743$  S/m;  $\epsilon_r = 40.068$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2412 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 5/802.11\_b\_WLAN2\_CH1\_Top\_0 mm Sensor On VS/Volume Scan (13x56x7):**

Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

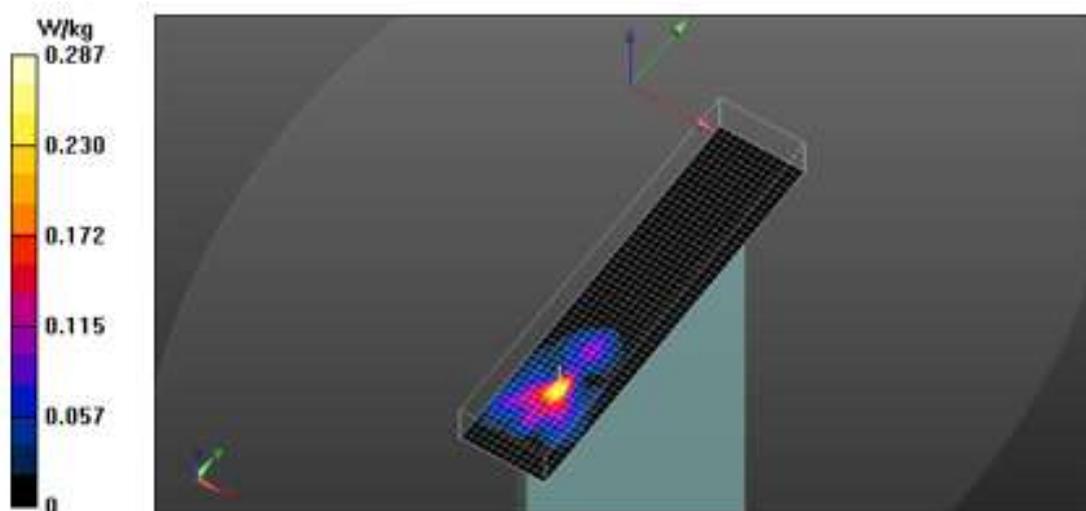
Reference Value = 13.02 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.455 W/kg

**SAR(1 g) = 0.124 W/kg; SAR(10 g) = 0.043 W/kg**

Total Absorbed Power = 0.00138 W

Maximum value of SAR (measured) = 0.287 W/kg



Date: 2020-05-26

Test Laboratory: KCTL Inc.

File Name: [3. 2.4G 802.11 Body Back-off Volume Scan MIMO Top.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N4006KDX**

Communication System: UID 0, 2.4G WLAN (0); Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.794$  S/m;  $\epsilon_r = 39.93$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2462 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 5/802.11\_b\_MIMO\_CH11\_Top\_0 mm Sensor On VS/Volume Scan (13x56x7):**

Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

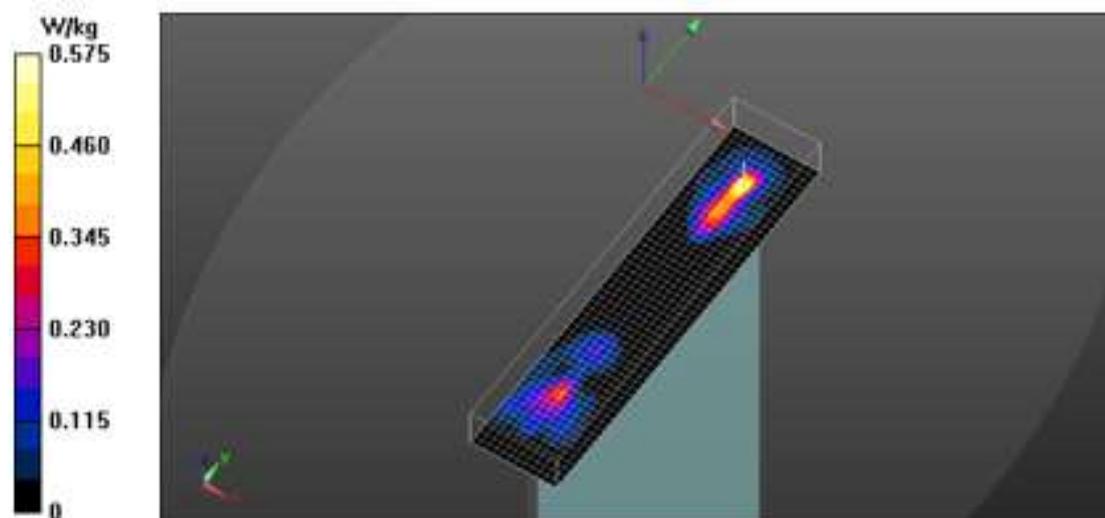
Reference Value = 11.50 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 1.35 W/kg

**SAR(1 g) = 0.236 W/kg; SAR(10 g) = 0.082 W/kg**

Total Absorbed Power = 0.00442 W

Maximum value of SAR (measured) = 0.575 W/kg



Date: 2020-06-18

Test Laboratory: KCTL Inc.

File Name: [4.5.6G\\_802.11\\_Body\\_Back-off\\_Volume\\_Scan\\_WLAN1\\_Top.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N400EXHN**

Communication System: UID 0, 5GWLAN (0); Frequency: 5610 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 5610$  MHz;  $\sigma = 4.993$  S/m;  $\epsilon_r = 35.112$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(4.69, 4.69, 4.69) @ 5610 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 5/802.11 ac\_VHT80\_WLAN1\_CH122\_Top\_0 mm Sensor On\_VS/Volume Scan****(13x56x7):** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 6.885 V/m; Power Drift = -0.10 dB

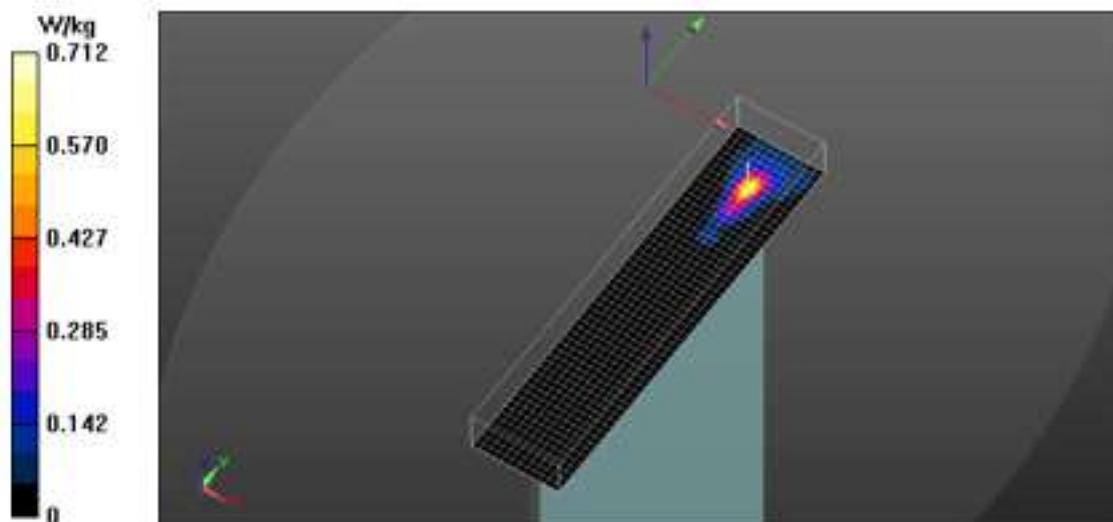
Peak SAR (extrapolated) = 1.21 W/kg

**SAR(1 g) = 0.232 W/kg; SAR(10 g) = 0.057 W/kg**

Total Absorbed Power = 0.00102 W

**Info: Interpolated medium parameters used for SAR evaluation.**

Maximum value of SAR (measured) = 0.712 W/kg



Date: 2020-06-20

Test Laboratory: KCTL Inc.

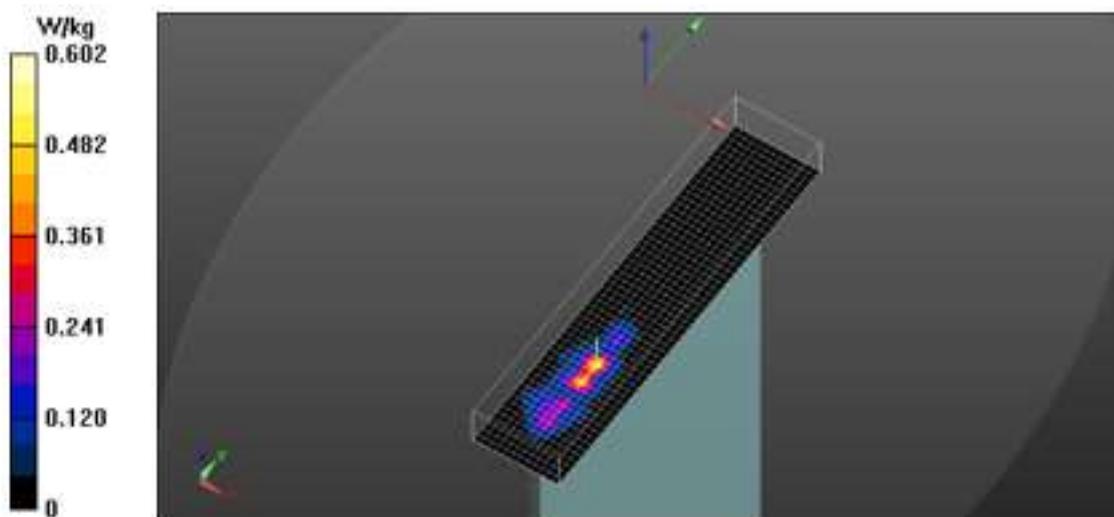
File Name: [5. 5.8G 802.11 Body Back-off Volume Scan WLAN2 Top.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N400EXHN**Communication System: UID 0, 5GWLAN (0); Frequency: 5775 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 5775$  MHz;  $\sigma = 5.11$  S/m;  $\epsilon_r = 35.809$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(4.65, 4.65, 4.65) @ 5775 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -2; Type: QD OVA 002 BB; Serial: 1220
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 5/802.11 ac\_VHT80\_WLAN2\_CH155\_Top\_0 mm Sensor On\_VS 2/Volume Scan (13x56x7):** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm  
Reference Value = 6.400 V/m; Power Drift = 0.15 dB  
Peak SAR (extrapolated) = 1.06 W/kg  
**SAR(1 g) = 0.155 W/kg; SAR(10 g) = 0.043 W/kg**  
Total Absorbed Power = 0.00102 W

Maximum value of SAR (measured) = 0.602 W/kg



Date: 2020-06-22

Test Laboratory: KCTL Inc.

File Name: [6.Bluetooth\\_GFSK\\_DH5\\_Body\\_Volume\\_Scan\\_WLAN1\\_Top.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N400EXHN**

Communication System: UID 0, Bluetooth (0); Frequency: 2402 MHz; Duty Cycle: 1:1.30167  
Medium parameters used (interpolated):  $f = 2402$  MHz;  $\sigma = 1.719$  S/m;  $\epsilon_r = 39.057$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2402 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 5/Bluetooth\_GFSK\_DH5\_Ant.1\_CH0\_Top\_0 mm Sensor On/Volume Scan**(13x56x7): Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 12.63 V/m; Power Drift = -0.16 dB

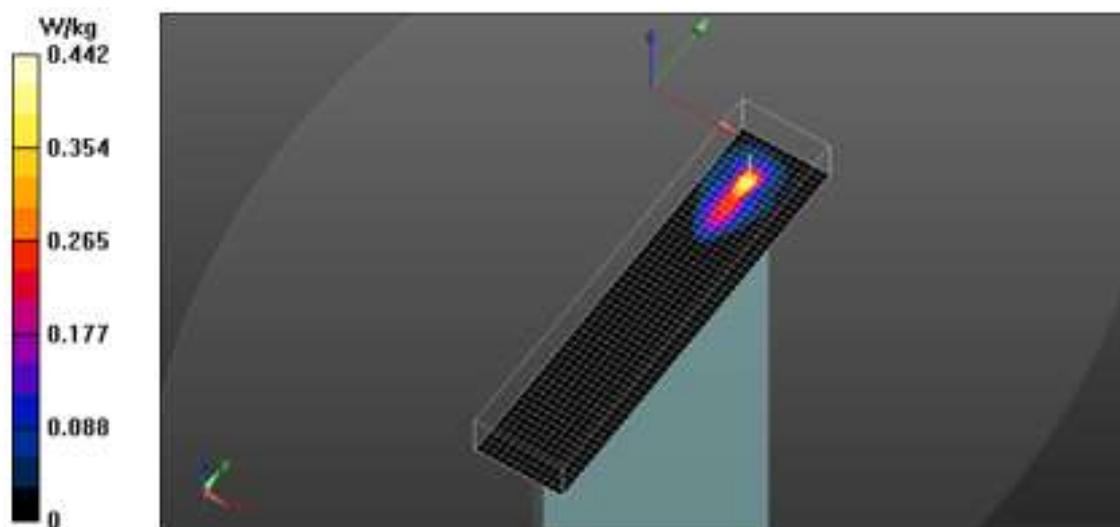
Peak SAR (extrapolated) = 0.934 W/kg

**SAR(1 g) = 0.172 W/kg; SAR(10 g) = 0.056 W/kg**

Total Absorbed Power = 0.00145 W

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.442 W/kg



Date: 2020-06-21

Test Laboratory: KCTL Inc.

File Name: [7.Bluetooth\\_GFSK\\_DH5\\_Body\\_Volume\\_Scan\\_WLAN2\\_Top.da53:0](#)**DUT: SM-T976B, Type: Tablet, Serial: R32N400EXHN**Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz; Duty Cycle: 1:1.30167  
Medium parameters used (interpolated):  $f = 2441$  MHz;  $\sigma = 1.775$  S/m;  $\epsilon_r = 38.845$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3928; ConvF(7.33, 7.33, 7.33) @ 2441 MHz; ; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn666; Calibrated: 2020-01-24
- Phantom: ELI V5.0 -3; Type: QD OVA 002 AA; Serial: 1173
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration 5/Bluetooth\_GFSK\_DH5\_Ant.2\_CH39\_Top\_0 mm Sensor On/Volume Scan**(13x56x7): Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.322 W/kg

**SAR(1 g) = 0.067 W/kg; SAR(10 g) = 0.024 W/kg**

Total Absorbed Power = 0.000640 W

**Info: Interpolated medium parameters used for SAR evaluation.**

Maximum value of SAR (measured) = 0.194 W/kg

