RF Exposure report

The following samples were submitted and identified on behalf of the client as:

Product Name	Digital Camera
Brand Name	FUJIFILM
Model No.	FF230003
Applicant	UNIVERSAL GLOBAL SCIENTIFIC INDUSTRIAL CO., LTD. 141, Lane 351, Sec.1, Taiping Road, Tsaotuen, Nantou, 542007, Taiwan
Standards	IEEE/ANSI C95.1-1992, IEEE 1528-2013
FCC ID	COF-WMBACBM25
Date of EUT Receipt	Jul. 31, 2023
Date of Test(s)	Aug. 08, 2023 ~ Aug. 09, 2023
Date of Issue	Sep. 15, 2023

In the configuration tested, the EUT complied with the standards specified above.

Remarks:

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS Taiwan Ltd. Central RF Lab or testing done by SGS Taiwan Ltd. Central RF Lab in connection with distribution or use of the product described in this report must be approved by SGS Taiwan Ltd. Central RF Lab in writing.

Signed on behalf of SGS

Clerk / Kimmy Chiou	PM / Kiki Lin	Approved By / John Yeh
Kimmy Chiou	Kiki Lin	John Yeh

Date: Sep. 15, 2023

Revision History

Report Number	Revision	Description	Issue Date	Revised By	Remark
TESA2307000445ES	00	Initial creation of document	Sep. 15, 2023	Kimmy Chiou	

Note:

1. The mark " * " is the revised version of the report due to comments submitted by the certification.

Contents

1 GENERAL INFORMATION

1.1 Test Methodology

The SAR testing method and procedure for this device is in accordance with the following standards:
IEEE/ANSI C95.1-1992
IEEE 1528-2013
KDB447498D01v06
KDB865664D01v01r04
KDB865664D02v01r02
KDB248227D01v02r02

1.2 Description of EUT

Product Name	Digital Camera	
Brand Name	FUJIFILM	
Model No.	FF230003	
FCC ID	COF-WMBACBM25	
Integrated WLAN Module	Brand Name: USI Model Name: WM-BAC-BM-25	
Duty Cycle	WLAN802.11	Please refer to section 7
	Bluetooth	Please refer to section 7
Supported radios (TX Frequency Range, MHz)	802.11 b/g/n	2.4GHz (2400.0 – 2483.5 MHz)
	802.11a/n/ac	5.2GHz (5150.0 –5350.0 MHz) 5.8GHz (5725.0 – 5850.0 MHz)
	Bluetooth 4.2	2.4GHz (2400.0 – 2483.5 MHz)

Note:
RF exposure evaluation covers only BLE portion, Bluetooth EDR mode not used and excluded in SAR report.

1.3 Maximum value

Summary of Maximum SAR and Power Density Value	
Mode	Highest SAR 1g (W/kg)
2.4G WLAN	0.04
5G WLAN	0.48

1.4 Antenna Information

Vendor	Universal Global Scientific Industrial Co., Ltd.			
Type	Chip Antenna			
Part Number	ANT3216A063R2455A			
Frequency(MHz)	2400~2500	5150~5250	5250~5350	5725~5850
Gain (dBi)	1.59	2.23	2.23	2.23
Note: Antenna information is provided by the applicant.				

2 MEASUREMENT SYSTEM

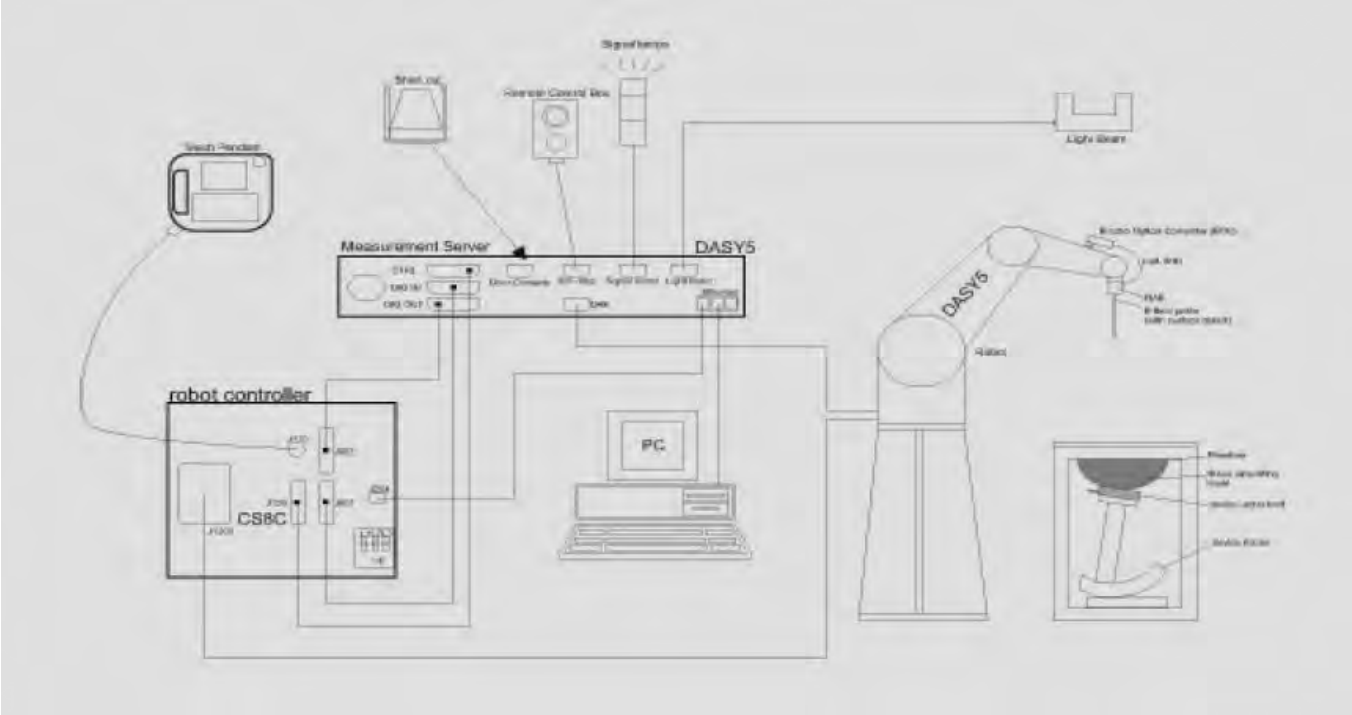
2.1 Test Facility

Laboratory	Test Site Address	Test Site Name	FCC Designation number	IC CAB identifier
SGS Taiwan Ltd. Central RF Lab. (TAF code 3702)	1F, No. 8, Alley 15, Lane 120, Sec. 1, NeiHu Road, Neihu District, Taipei City, 11493, Taiwan.	SAR 2	TW0029	TW3702
		SAR 6		
	No. 2, Keji 1st Rd., Guishan Township, Taoyuan County, 33383, Taiwan	SAR 1	TW0028	
		SAR 4		
	No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan	SAR 3	TW0027	
		SAR 7		
Note: Test site name is remarked on the equipment list in each section of this report as an indication where measurements occurred in specific test site and address.				

2.2 SAR System

Block Diagram (DASY5)

A block diagram of the SAR measurement System is given in below. This SAR measurement system uses a computer-controlled 3-D stepper motor system (SPEAG DASY 5 professional system). The model EX3DV4 field probe is used to determine the internal electric fields. The SAR can be obtained from the equation SAR= σ ($|Ei|^2$)/ ρ where σ and ρ are the conductivity and mass density of the tissue-simulant.



EX3DV4 E-Field Probe

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Calibration	Basic Broad Band Calibration in air Conversion Factors (CF) for HSL 2450/5250/5750MHz Additional CF for other liquids and frequencies upon request	
Frequency	10 MHz to > 6 GHz	
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)	
Dynamic Range	10 µW/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 µW/g)	
Dimensions	Tip diameter: 2.5 mm	
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.	

PHANTOM (ELI)

Model	ELI	
Construction	The ELI phantom is used for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles.	
Shell Thickness	2 ± 0.2 mm	
Filling Volume	Approx. 30 liters	
Dimensions	Major axis: 600 mm Minor axis: 400 mm	

DEVICE HOLDER

Construction	The device holder (Supporter) for Notebook is made by POM (polyoxymethylene resin) , which is non-metal and non-conductive. The height can be adjusted to fit varies kind of notebooks.	 Device Holder

3 SAR SYSTEM VERIFICATION

3.1 Tissue Simulating Liquid

For the measurement of the field distribution inside the SAM phantom with DASY, the phantom must be filled with homogeneous tissue simulating liquid. For head SAR testing, the liquid height from the ear rint (ERP) of the phantom to the liquid top surface is larger than 15cm. For body SAR testing, the liquid height fromeference po the center of the flat phantom to the liquid top surface is larger than 15cm.

3.2 Tissue Simulant Liquid measurement

The dielectric properties for this Head-simulant fluid were measured by using the SPEAG Dielectric Assessment Kit (DAKS-3.5)
All dielectric parameters of tissue simulates were measured within 24 hours of SAR measurements. The measured conductivity and permittivity are all within ± 5% of the target values.

3.3 Measurement results of Tissue Simulant Liquid

Measured Frequency (MHz)	Target Dielectric Constant, εr	Target Conductivity, σ (S/m)	Measured Dielectric Constant, εr	Measured Conductivity, σ (S/m)	% dev εr	% dev σ	Limit	Measurement Date
2402	39.282	1.757	40.243	1.778	2.45%	1.20%	± 5%	Aug. 08, 2023
2412	39.265	1.766	40.221	1.795	2.43%	1.64%	± 5%	
2417	39.257	1.771	40.208	1.809	2.42%	2.15%	± 5%	
2437	39.222	1.788	40.181	1.821	2.45%	1.85%	± 5%	
2440	39.217	1.791	40.173	1.833	2.44%	2.35%	± 5%	
2450	39.200	1.800	40.148	1.847	2.42%	2.61%	± 5%	
2457	39.191	1.807	40.135	1.852	2.41%	2.49%	± 5%	
2462	39.184	1.813	40.118	1.861	2.38%	2.65%	± 5%	
2480	39.160	1.832	40.066	1.887	2.31%	3.00%	± 5%	
5210	35.990	4.670	36.932	4.779	2.62%	2.33%	± 5%	Aug. 09, 2023
5250	35.950	4.710	36.874	4.821	2.57%	2.36%	± 5%	
5290	35.910	4.750	36.833	4.863	2.57%	2.38%	± 5%	
5750	35.350	5.220	36.315	5.349	2.73%	2.47%	± 5%	
5775	35.325	5.245	36.257	5.375	2.64%	2.48%	± 5%	

3.4 The composition of the tissue simulating liquid:

Simulating Liquids for 600 MHz -10 GHz, Manufactured by SPEAG:

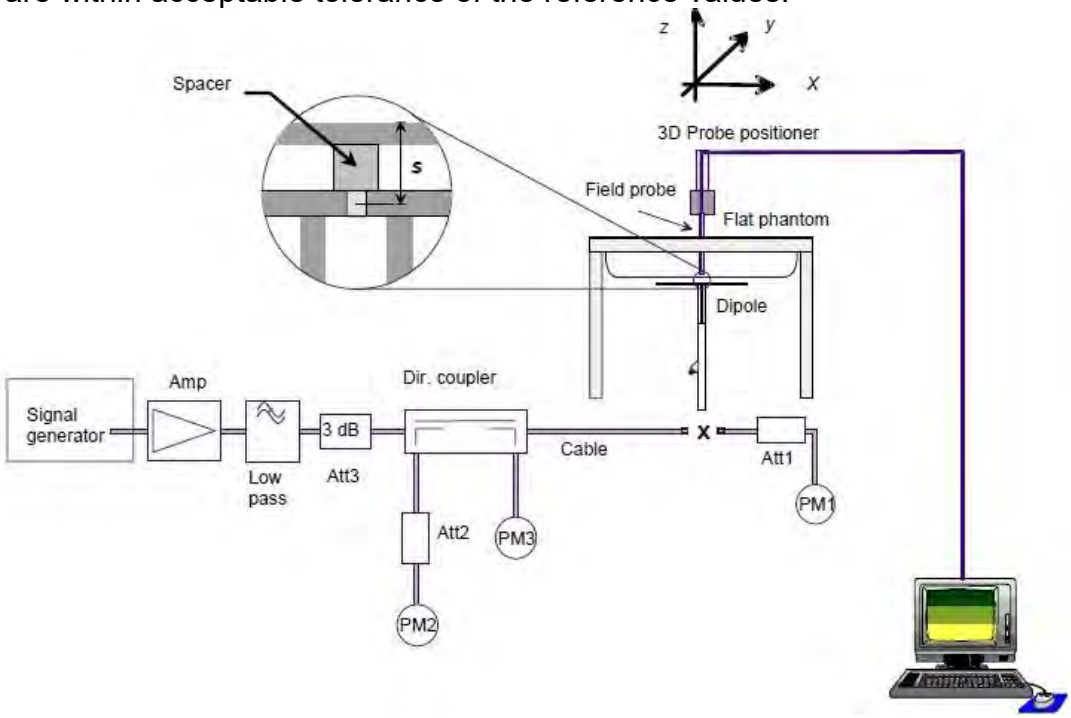
Broad-band head tissue simulating liquids	SPEAG Product	Frequency range (MHz)	Main Ingredients
	HBBL600-10000V6	600 - 10000	Water, Oil

3.5 System check

The microwave circuit arrangement for system check is sketched in below. The daily system accuracy verification occurs within the flat section of the SAM phantom and ELI phantom. A SAR measurement was performed to see if the measured SAR was within +/- 10% from the target SAR values.

The tests were conducted on the same days as the measurement of the DUT. The obtained results from the system accuracy verification are displayed with SAR values normalized to 1W forward power delivered to the dipole.

During the tests, the liquid depth from the center of the flat phantom to the liquid top surface was 15 cm above in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values.



The block diagram of system check

3.6 System check results

Validation Kit	S/N	Frequency (MHz)	1W Target 1g-SAR (W/kg)	pin=250mW Measured 1g-SAR (W/kg)	Normalized to 1W 1g-SAR (W/kg)	Deviation (%)	Limit	Measurement Date
D2450V2	727	2450	53.1	13.2	52.8	-0.56	± 10%	Aug.08,2023
Validation Kit	S/N	Frequency (MHz)	1W Target 1g-SAR (W/kg)	pin=100mW Measured 1g-SAR (W/kg)	Normalized to 1W 1g-SAR (W/kg)	Deviation (%)	Limit	Measurement Date
D5GHzV2	1023	5250	80.5	8.25	82.5	2.48	± 10%	Aug.09,2023
D5GHzV2	1023	5750	80.4	8.59	85.9	6.84	± 10%	Aug.09,2023

4 TEST CONFIGURATIONS

4.1 Test Environment

Ambient Temperature: 22±2° C
Tissue Simulating Liquid: 22±2° C

4.2 Test Note

- **General:** Measurements are performed respectively on the lowest, middle and highest channels of the operating band(s).
- **General:** The EUT is set to maximum power level during all tests, and at the beginning of each test the battery is fully charged.
- **General:** During the SAR testing, the DASY system checks power drift by comparing the e-field strength of one specific location measured at the beginning with that measured at the end of the SAR testing.
- **General:** According to KDB447498D01v06, testing of other required channels is not required when the reported 1-g SAR for the highest output channel is ≤ 0.8 W/kg, when the transmission band is ≤ 100 MHz.
- **General:** According to KDB865664D01v01r04, SAR measurement variability must be assessed for each frequency band. When the original highest measured SAR is ≥ 0.8 W/kg, repeated that measurement once. Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
- **WLAN 2.4GHz:** 802.11b DSSS SAR Test Requirements: SAR is measured for 2.4 GHz 802.11b DSSS mode using the highest measured maximum output power channel, when the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration. When the reported SAR is > 0.8 W/kg, SAR is required for that exposure configuration using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.
- **WLAN 2.4GHz:** 802.11g/n OFDM SAR Test Exclusion Requirements: SAR is not required for 802.11g/n since the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

• **WLAN 5GHz:** Initial Test Configuration: An initial test configuration is determined for OFDM transmission modes according to the channel bandwidth, modulation and data rate combination(s) with the highest maximum output power specified for production units in each standalone and aggregated frequency band. SAR is measured using the highest measured maximum output power channel. When the reported SAR of the initial test configuration is > 0.8 W/kg, SAR measurement is required for the subsequent next highest measured output power channel(s) in the initial test configuration until the reported SAR is ≤ 1.2 W/kg or all required channels are tested. Since the highest reported SAR for the initial test configuration is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for subsequent test configuration.

4.3 Test position

SAR is measured with front tilt/front surface/back surface/bottom edge/right edge touch against the flat phantom.

4.4 Test limit

§ 2.1093(d)(1)
Applications for equipment authorization of portable RF sources subject to routine environmental evaluation must contain a statement confirming compliance with the limits specified in § 1.1310 as part of their application. Technical information showing the basis for this statement must be submitted to the Commission upon request. The SAR limits specified in § 1.1310(a) through (c) of this chapter shall be used for evaluation of portable devices transmitting in the frequency range from 100 kHz to 6 GHz. Portable devices that transmit at frequencies above 6 GHz shall be evaluated in terms of the MPE limits specified in Table 1 to § 1.1310(e)(1). A minimum separation distance applicable to the operating configurations and exposure conditions of the device shall be used for the evaluation. In general, maximum time-averaged power levels must be used for evaluation. All unlicensed personal communications service (PCS) devices and unlicensed NII devices shall be subject to the limits for general population/uncontrolled exposure.
Radiofrequency radiation exposure limits.
§ 1.1310(a)
Specific absorption rate (SAR) shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in § 1.1307(b) within the frequency range of 100 kHz to 6 GHz (inclusive).
§ 1.1310(b)
The SAR limits for occupational/controlled exposure are 0.4 W/kg, as averaged over the whole body, and a peak spatial-average SAR of 8 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit for occupational/controlled exposure is 20 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 6 minutes to determine compliance with occupational/controlled SAR limits.
§ 1.1310(c)
The SAR limits for general population/uncontrolled exposure are 0.08 W/kg, as averaged over the whole body, and a peak spatial-average SAR of 1.6 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit is 4 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 30 minutes to determine compliance with general population/uncontrolled SAR limits.

Note to paragraphs (a) through (c):
SAR is a measure of the rate of energy absorption due to exposure to RF electromagnetic energy. These SAR limits to be used for evaluation are based generally on criteria published by the American National Standards Institute (ANSI) for localized SAR in Section 4.2 of “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” ANSI/IEEE Std C95.1-1992, copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017. These criteria for SAR evaluation are similar to those recommended by the National Council on Radiation Protection and Measurements (NCRP) in “Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,” NCRP Report No. 86, Section 17.4.5, copyright 1986 by NCRP, Bethesda, Maryland 20814. Limits for whole body SAR and peak spatial-average SAR are based on recommendations made in both of these documents. The MPE limits in Table 1 are based generally on criteria published by the NCRP in “Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,” NCRP Report No. 86, Sections 17.4.1, 17.4.1.1, 17.4.2 and 17.4.3, copyright 1986 by NCRP, Bethesda, Maryland 20814. In the frequency range from 100 MHz to 1500 MHz, these MPE exposure limits for field strength and power density are also generally based on criteria recommended by the ANSI in Section 4.1 of “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” ANSI/IEEE Std C95.1-1992, copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017.

Portable devices that transmit at frequencies above 6 GHz shall be evaluated in terms of the MPE limits specified in Table 1 to § 1.1310(e)(1).
According to ANSI/IEEE C95.1-1992, the criteria listed in the following Table shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.
Peak Spatially Averaged Power Density was evaluated over a circular area of 4cm2 per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(i) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*(100)	≤6
3.0-30	1842/f	4.89/f	*($900/f^2$)	<6
30-300	61.4	0.163	1.0	<6
300-1,500			f/300	<6
1,500-100,000			5	<6
(ii) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*($180/f^2$)	<30
30-300	27.5	0.073	0.2	<30
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

f = frequency in MHz. * = Plane-wave equivalent power density.

Table 1 to § 1.1310(e)(1) - Limits for Maximum Permissible Exposure (MPE)

5 MAXIMUM OUTPUT POWER

5.1 WLAN

Ant 1						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
2.45GHz	802.11b	1	2412	1Mbps	14.00	13.98
		6	2437		14.00	13.90
		11	2462		14.00	13.84
	802.11g	1	2412	6Mbps	14.00	13.80
		6	2437		14.00	13.61
		11	2462		14.00	13.73
	802.11n20-HT0	1	2412	MCS0	14.00	13.69
		6	2437		14.00	13.76
		11	2462		14.00	13.70

Ant 1						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.15-5.25 GHz	802.11a	36	5180	6Mbps	13.50	13.24
		40	5200		13.50	13.23
		44	5220		13.50	13.34
		48	5240		13.50	13.26
	802.11n20-HT0	36	5180	MCS0	13.50	13.31
		40	5200		13.50	13.38
		44	5220		13.50	13.23
		48	5240		13.50	13.22
	802.11ac20-VHT0	36	5180	MCS0	13.50	13.20
		40	5200		13.50	13.26
		44	5220		13.50	13.32
		48	5240		13.50	13.29
	802.11n40-HT0	38	5190	MCS0	13.50	13.31
		46	5230		13.50	13.25
	802.11ac40-VHT0	38	5190	MCS0	13.50	13.30
		46	5230		13.50	13.26
	802.11ac80-VHT0	42	5210	MCS0	13.50	13.48

Ant 1						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.25-5.35 GHz	802.11a	52	5260	6Mbps	13.50	13.37
		56	5280		13.50	13.30
		60	5300		13.50	13.40
		64	5320		13.50	13.38
	802.11n20-HT0	52	5260	MCS0	13.50	13.26
		56	5280		13.50	13.39
		60	5300		13.50	13.35
		64	5320		13.50	13.27
	802.11ac20-VHT0	52	5260	MCS0	13.50	13.25
		56	5280		13.50	13.23
		60	5300		13.50	13.35
		64	5320		13.50	13.38
	802.11n40-HT0	54	5270	MCS0	13.50	13.22
		62	5310		13.50	13.21
	802.11ac40-VHT0	54	5270	MCS0	13.50	13.37
		62	5310		13.50	13.35
	802.11ac80-VHT0	58	5290	MCS0	13.50	13.42

Ant 1						
Mode	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.8GHz	802.11a	149	5745	6Mbps	13.50	13.27
		157	5785		13.50	13.20
		165	5825		13.50	13.36
	802.11n20-HT0	149	5745	MCS0	13.50	13.18
		157	5785		13.50	13.24
		165	5825		13.50	13.31
	802.11ac20-VHT0	149	5745	MCS0	13.50	13.23
		157	5785		13.50	13.26
		165	5825		13.50	13.21
	802.11n40-HT0	151	5755	MCS0	13.50	13.27
		159	5795		13.50	13.22
	802.11ac40-VHT0	151	5755	MCS0	13.50	13.28
		159	5795		13.50	13.24
	802.11ac80-VHT0	155	5775	MCS0	13.50	13.45

5.2 BLE

Mode	Channel	Frequency (MHz)	GFSK	
			Max. Rated Avg.Power + Max. Tolerance (dBm)	Average Output Power (dBm)
BLE_1M	CH 00	2402	6	4.02
	CH 19	2440		4.07
	CH 39	2480		4.13

6 DUTY CYCLE

2.4G b duty	(12.36/12.51=0.988) Scaling Factor=1.012

BLE duty	(0.462/0.624=0.74) Scaling Factor=1.351

5G ac80 duty	(1.94/2.04=0.95) Scaling Factor=1.052

7 SUMMARY OF RESULTS

7.1 Decision rules

Reported measurement data comply with Test Methodology in section 1.1.
Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

7.2 Summary of SAR Results

Band	Antenna	Position	Distance (mm)	Channel	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		ID
										Measured	Reported	
WLAN 802.11b	Ant 1	Front Tilt	0	1	2412	14.00	13.98	1.01	100.46%	0.002	0.002	-
WLAN 802.11b	Ant 1	Front Surface	0	1	2412	14.00	13.98	1.01	100.46%	0.001	0.001	-
WLAN 802.11b	Ant 1	Back Surface	0	1	2412	14.00	13.98	1.01	100.46%	0.010	0.010	-
WLAN 802.11b	Ant 1	Bottom Edge	0	1	2412	14.00	13.98	1.01	100.46%	0.024	0.024	-
WLAN 802.11b	Ant 1	Right Edge	0	1	2412	14.00	13.98	1.01	100.46%	0.042	0.043	001
WLAN 802.11b	Ant 1	Right Edge	0	6	2437	14.00	13.90	1.01	102.33%	0.038	0.039	-
WLAN 802.11b	Ant 1	Right Edge	0	11	2462	14.00	13.84	1.01	103.75%	0.035	0.037	-

Band	Antenna	Position	Distance (mm)	Channel	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		ID
										Measured	Reported	
BLE_1M	Ant 1	Front Tilt	0	39	2480	6.00	4.13	1.35	153.82%	0.001	0.002	-
BLE_1M	Ant 1	Front Surface	0	39	2480	6.00	4.13	1.35	153.82%	0.001	0.002	-
BLE_1M	Ant 1	Back Surface	0	39	2480	6.00	4.13	1.35	153.82%	0.005	0.010	-
BLE_1M	Ant 1	Bottom Edge	0	39	2480	6.00	4.13	1.35	153.82%	0.006	0.012	-
BLE_1M	Ant 1	Right Edge	0	39	2480	6.00	4.13	1.35	153.82%	0.008	0.017	002

Band	Antenna	Position	Distance (mm)	Channel	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		ID
										Measured	Reported	
WLAN 802.11ac(80M) 5.2G	Ant 1	Front Tilt	0	42	5210	13.50	13.48	1.05	100.46%	0.006	0.006	-
WLAN 802.11ac(80M) 5.2G	Ant 1	Front Surface	0	42	5210	13.50	13.48	1.05	100.46%	0.001	0.001	-
WLAN 802.11ac(80M) 5.2G	Ant 1	Back Surface	0	42	5210	13.50	13.48	1.05	100.46%	0.007	0.007	-
WLAN 802.11ac(80M) 5.2G	Ant 1	Bottom Edge	0	42	5210	13.50	13.48	1.05	100.46%	0.001	0.001	-
WLAN 802.11ac(80M) 5.2G	Ant 1	Right Edge	0	42	5210	13.50	13.48	1.05	100.46%	0.044	0.047	003

Band	Antenna	Position	Distance (mm)	Channel	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		ID
										Measured	Reported	
WLAN 802.11ac(80M) 5.3G	Ant 1	Front Tilt	0	58	5290	13.50	13.42	1.05	101.86%	0.004	0.004	-
WLAN 802.11ac(80M) 5.3G	Ant 1	Front Surface	0	58	5290	13.50	13.42	1.05	101.86%	0.001	0.001	-
WLAN 802.11ac(80M) 5.3G	Ant 1	Back Surface	0	58	5290	13.50	13.42	1.05	101.86%	0.005	0.005	-
WLAN 802.11ac(80M) 5.3G	Ant 1	Bottom Edge	0	58	5290	13.50	13.42	1.05	101.86%	0.001	0.001	-
WLAN 802.11ac(80M) 5.3G	Ant 1	Right Edge	0	58	5290	13.50	13.42	1.05	101.86%	0.041	0.044	004

Band	Antenna	Position	Distance (mm)	Channel	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Duty cycle scaling	Power scaling	Averaged SAR over 1g (W/kg)		ID
										Measured	Reported	
WLAN 802.11ac(80M) 5.8G	Ant 1	Front Tilt	0	155	5775	13.50	13.45	1.05	101.16%	0.034	0.036	-
WLAN 802.11ac(80M) 5.8G	Ant 1	Front Surface	0	155	5775	13.50	13.45	1.05	101.16%	0.001	0.001	-
WLAN 802.11ac(80M) 5.8G	Ant 1	Back Surface	0	155	5775	13.50	13.45	1.05	101.16%	0.029	0.031	-
WLAN 802.11ac(80M) 5.8G	Ant 1	Bottom Edge	0	155	5775	13.50	13.45	1.05	101.16%	0.001	0.001	-
WLAN 802.11ac(80M) 5.8G	Ant 1	Right Edge	0	155	5775	13.50	13.45	1.05	101.16%	0.448	0.477	005

Note:
Reported SAR = measured SAR * Power scaling * Duty cycle scaling

7.3 Reporting statements of conformity

The conformity statement in this report is based solely on the test results, measurement uncertainty is excluded.

7.4 Conclusion

The device is compliant because all the standalone results are less than their corresponding criteria.

8 INSTRUMENTS LIST

Equipment List					
Manufacturer	**Device**	**Type**	**Serial number**	**Date of last calibration**	**Date of next calibration**
SPEAG	Data acquisition Electronics	DAE4	1751	Oct/10/2022	Oct/09/2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	7754	Oct/26/2022	Oct/25/2023
SPEAG	System Validation Dipole	D2450V2	727	Apr/25/2023	Apr/24/2024
SPEAG	System Validation Dipole	D5GHzV2	1023	Jan/19/2023	Jan/18/2024
SPEAG	Dielectric Assessment Kit	DAKS-3.5	0004	Jan/25/2023	Jan/24/2024
R&S	MXG Analog Signal Generator	SMB100A03	182996	Apr/08/2023	Apr/07/2024
Agilent	Dual-directional coupler	772D	MY52180142	Oct/19/2022	Oct/18/2023
Agilent	Dual-directional coupler	778D	MY52180302	Oct/19/2022	Oct/18/2023
EMCI	Amplifier	ZHL-42	980189	Calibration not required	Calibration not required
EMCI	Amplifier	ZVE-8G	980190	Calibration not required	Calibration not required
R&S	Power Sensor	NRP18S	101973	Feb/06/2023	Feb/05/2024
R&S	Power Meter	NRX	102191	Feb/06/2023	Feb/05/2024
R&S	Power Sensor	NRP50S	101358	Feb/06/2023	Feb/05/2024
SPEAG	Software	DASY 52 V52.10.4.1527	N/A	Calibration not required	Calibration not required
SPEAG	Phantom	ELI	N/A	Calibration not required	Calibration not required
LKM	Digital thermometer	DTM3000	EC14010603	Sep/27/2022	Sep/26/2023
TECPEL	Digital thermometer	DTM-303A	TP190085	Jan/11/2023	Jan/10/2024

9 UNCERTAINTY BUDGET

Measurement Uncertainty evaluation template for DUT SAR test (3-6G)

A	c	D	e		f	g	h=c * f / e	i=c * g / e	k
Source of Uncertainty	Tolerance/ Uncertainty	Probability Distributio	Div	Div Value	ci (1g)	ci (10g)	Standard uncertainty	Standard uncertainty	vi, or Veff
Measurement system									
Probe calibration	6.55%	N	1	1	1	1	6.55%	6.55%	∞
Isotropy , Axial	3.50%	R	√3	1.732	1	1	2.02%	2.02%	∞
Isotropy, Hemispherical	9.60%	R	√3	1.732	1	1	5.54%	5.54%	∞
Modulation Response	2.40%	R	√3	1.732	1	1	1.40%	1.40%	∞
Boundary Effect	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Linearity	4.70%	R	√3	1.732	1	1	2.71%	2.71%	∞
Detection Limits	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Readout Electronics	0.30%	N	1	1	1	1	0.30%	0.30%	∞
Response time	0.80%	R	√3	1.732	1	1	0.46%	0.46%	∞
Integration Time	2.60%	R	√3	1.732	1	1	1.50%	1.50%	∞
Measurement drift (class A evaluation)	1.75%	R	√3	1.732	1	1	1.01%	1.01%	∞
RF ambient condition - noise	3.00%	R	√3	1.732	1	1	1.73%	1.73%	∞
RF ambient conditions - reflections	3.00%	R	√3	1.732	1	1	1.73%	1.73%	∞
Probe positioner Mechanical restrictions	0.40%	R	√3	1.732	1	1	0.23%	0.23%	∞
Probe Positioning with respect to phantom shell	2.90%	R	√3	1.732	1	1	1.67%	1.67%	∞
Post-processing	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Max SAR Eval	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Test Sample related									
Test sample positioning	2.90%	N	1	1	1	1	2.90%	2.90%	M-1
Device Holder Uncertainty	3.60%	N	1	1	1	1	3.60%	3.60%	M-1
Drift of output power	5.00%	R	√3	1.732	1	1	2.89%	2.89%	∞
Phantom and Setup									
Phantom Uncertainty	4.00%	R	√3	1.732	1	1	2.31%	2.31%	∞
Liquid permittivity (mea.)	2.73%	N	1	1	0.64	0.43	1.75%	1.17%	M
Liquid Conductivity (mea.)	2.48%	N	1	1	0.6	0.49	1.49%	1.22%	M
Combined standard uncertainty		RSS					11.94%	11.83%	
Expant uncertainty (95% confidence interval), K=2							23.88%	23.66%	

Measurement Uncertainty evaluation template for DUT SAR test (0.3-3G)

A	c	D	e		f	g	h=c * f / e	i=c * g / e	k
Source of Uncertainty	Tolerance/ Uncertainty	Probability Distributio	Div	Div Value	ci (1g)	ci (10g)	Standard uncertainty	Standard uncertainty	vi, or Veff
Measurement system									
Probe calibration	6.00%	N	1	1	1	1	6.00%	6.00%	∞
Isotropy , Axial	3.50%	R	√3	1.732	1	1	2.02%	2.02%	∞
Isotropy, Hemispherical	9.60%	R	√3	1.732	1	1	5.54%	5.54%	∞
Modulation Response	2.40%	R	√3	1.732	1	1	1.40%	1.40%	∞
Boundary Effect	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Linearity	4.70%	R	√3	1.732	1	1	2.71%	2.71%	∞
Detection Limits	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Readout Electronics	0.30%	N	1	1	1	1	0.30%	0.30%	∞
Response time	0.80%	R	√3	1.732	1	1	0.46%	0.46%	∞
Integration Time	2.60%	R	√3	1.732	1	1	1.50%	1.50%	∞
Measurement drift (class A evaluation)	1.75%	R	√3	1.732	1	1	1.01%	1.01%	∞
RF ambient condition - noise	3.00%	R	√3	1.732	1	1	1.73%	1.73%	∞
RF ambient conditions - reflections	3.00%	R	√3	1.732	1	1	1.73%	1.73%	∞
Probe positioner Mechanical restrictions	0.40%	R	√3	1.732	1	1	0.23%	0.23%	∞
Probe Positioning with respect to phantom shell	2.90%	R	√3	1.732	1	1	1.67%	1.67%	∞
Post-processing	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Max SAR Eval	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Test Sample related									
Test sample positioning	2.90%	N	1	1	1	1	2.90%	2.90%	M-1
Device Holder Uncertainty	3.60%	N	1	1	1	1	3.60%	3.60%	M-1
Drift of output power	5.00%	R	√3	1.732	1	1	2.89%	2.89%	∞
Phantom and Setup									
Phantom Uncertainty	4.00%	R	√3	1.732	1	1	2.31%	2.31%	∞
Liquid permittivity (mea.)	2.45%	N	1	1	0.64	0.43	1.57%	1.05%	M
Liquid Conductivity (mea.)	3.00%	N	1	1	0.6	0.49	1.80%	1.47%	M
Combined standard uncertainty		RSS					11.66%	11.55%	
Expant uncertainty (95% confidence interval), K=2							23.33%	23.10%	

10 SAR MEASUREMENT RESULTS

Date: 2023/8/8

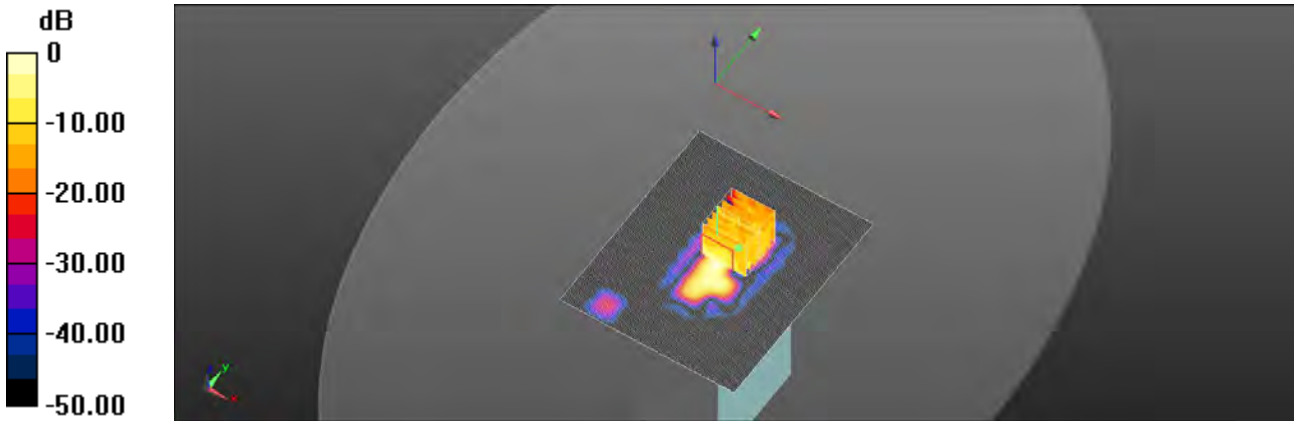
ID: 001
Report No. :TESA2307000445ES
WLAN 802.11b_Body_Right Edge_CH 1_0mm_Ant1
Communication System: WLAN; Frequency: 2412 MHz; Duty cycle= 1:1.012
Medium parameters used: f = 2412 MHz; σ = 1.795 S/m; ε_r = 40.221; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7754; ConvF(7.45, 7.45, 7.45); Calibrated: 2022/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1751; Calibrated: 2022/10/10
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (101x121x1): Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 0.133 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.281 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.165 W/kg
SAR(1 g) = 0.042 W/kg; SAR(10 g) = 0.018 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 49.8%
Maximum value of SAR (measured) = 0.0765 W/kg



0 dB = 0.0765 W/kg = -11.16 dBW/kg

Date: 2023/8/8

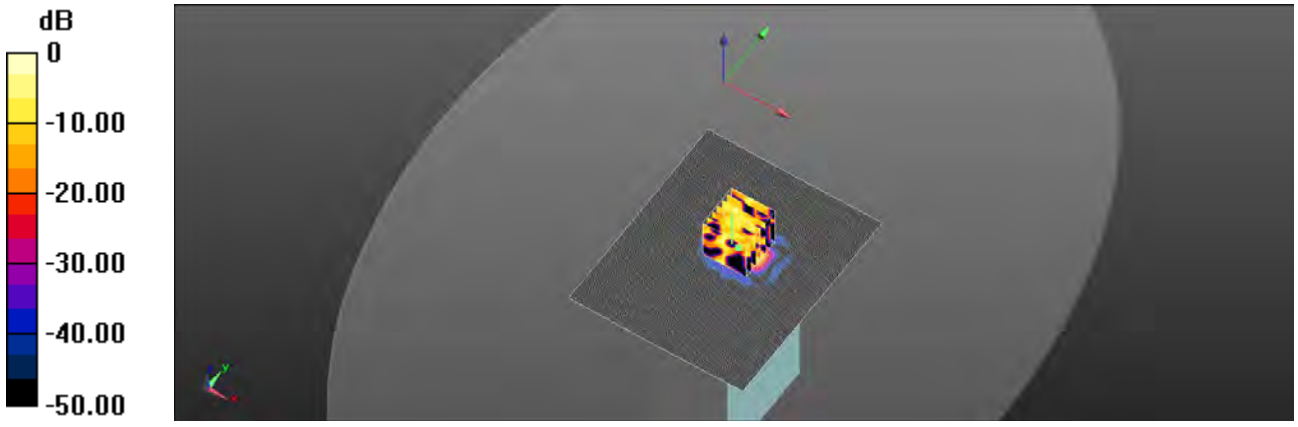
ID: 002
Report No. :TESA2307000445ES
BLE_1M_Body_Right Edge_CH 39_0mm_ Ant1
Communication System: Bluetooth; Frequency: 2480 MHz; Duty cycle= 1:1.351
Medium parameters used: f = 2480 MHz; σ = 1.887 S/m; ε_r = 40.066; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7754; ConvF(7.45, 7.45, 7.45); Calibrated: 2022/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1751; Calibrated: 2022/10/10
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (101x121x1): Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 0.0151 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.765 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.0290 W/kg
SAR(1 g) = 0.008 W/kg; SAR(10 g) = 0.001 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 47.8%
Maximum value of SAR (measured) = 0.0183 W/kg



0 dB = 0.0183 W/kg = -17.38 dBW/kg

Date: 2023/8/9

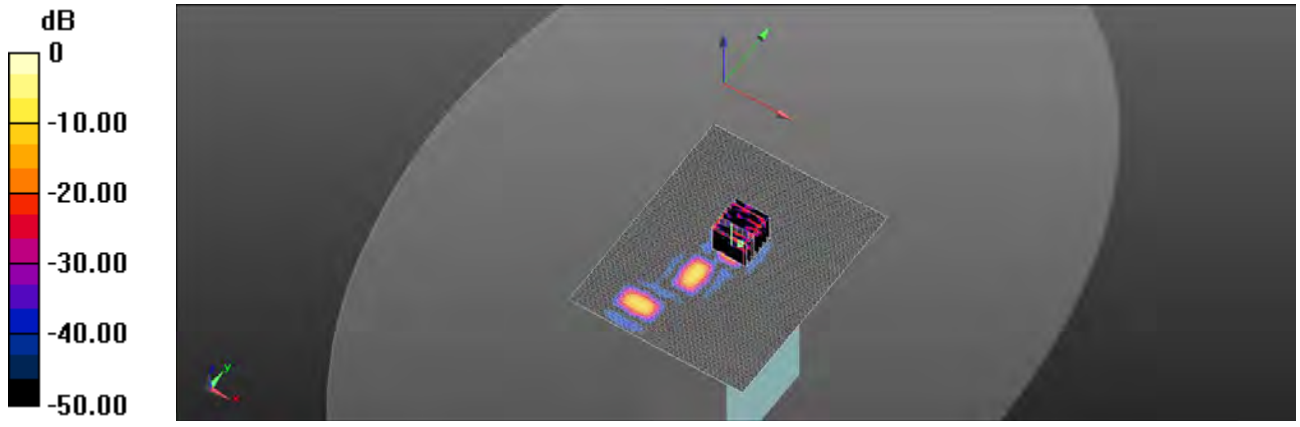
ID: 003
Report No. :TESA2307000445ES
WLAN 802.11ac(80M) 5.2G_Body_Right Edge_CH 42_0mm_ Ant1
Communication System: WLAN; Frequency: 5210 MHz; Duty cycle= 1:1.052
Medium parameters used: f = 5210 MHz; σ = 4.779 S/m; ε_r = 36.932; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.2°C; Liquid temperature: 22.1°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7754; ConvF(4.7, 4.7, 4.7); Calibrated: 2022/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1751; Calibrated: 2022/10/10
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (121x151x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 0.144 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 5.013 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.505 W/kg
SAR(1 g) = 0.044 W/kg; SAR(10 g) = 0.006 W/kg
Smallest distance from peaks to all points 3 dB below = 5.2 mm
Ratio of SAR at M2 to SAR at M1 = 47.1%
Maximum value of SAR (measured) = 0.105 W/kg



0 dB = 0.105 W/kg = -9.77 dBW/kg

Date: 2023/8/9

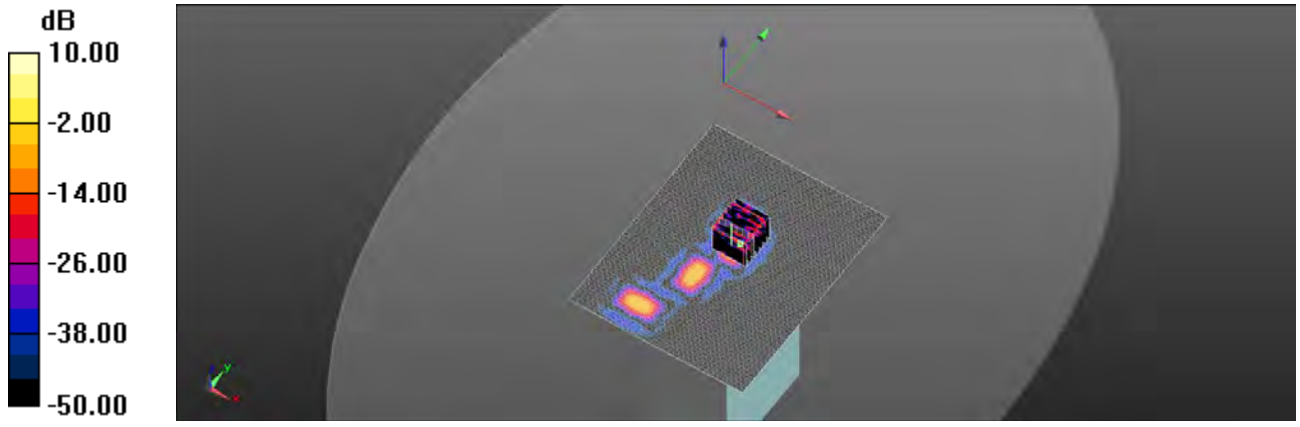
ID: 004
Report No. :TESA2307000445ES
WLAN 802.11ac(80M) 5.3G_Body_Right Edge_CH 58_0mm_ Ant1
Communication System: WLAN; Frequency: 5290 MHz; Duty cycle= 1:1.052
Medium parameters used: f = 5290 MHz; σ = 4.863 S/m; ε_r = 36.833; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.2°C; Liquid temperature: 22.1°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7754; ConvF(4.7, 4.7, 4.7); Calibrated: 2022/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1751; Calibrated: 2022/10/10
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (121x151x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 0.133 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 5.175 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.901 W/kg
SAR(1 g) = 0.041 W/kg; SAR(10 g) = 0.004 W/kg
Smallest distance from peaks to all points 3 dB below = 5.2 mm
Ratio of SAR at M2 to SAR at M1 = 47%
Maximum value of SAR (measured) = 0.127 W/kg



0 dB = 0.127 W/kg = -8.96 dBW/kg

Date: 2023/8/9

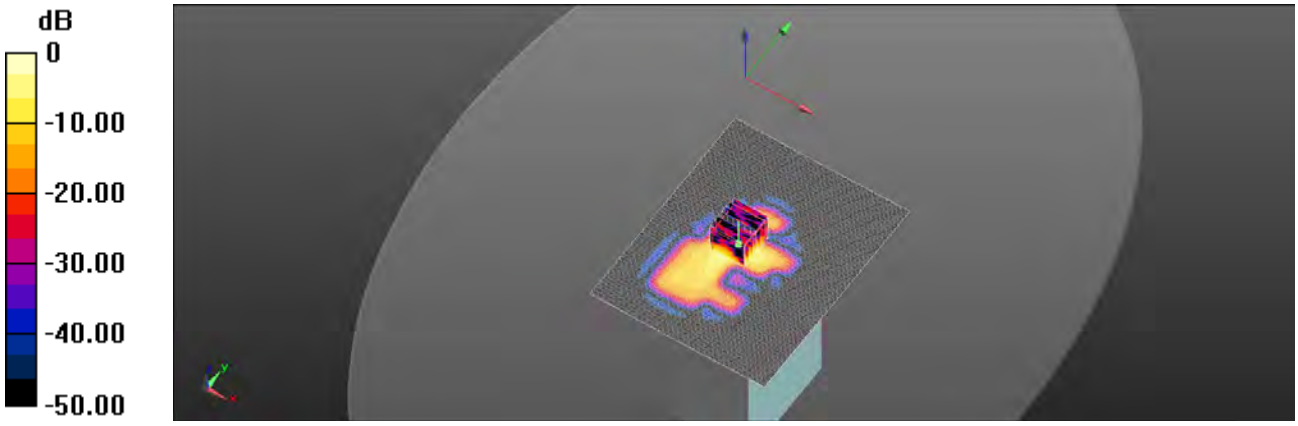
ID: 005
Report No. :TESA2307000445ES
WLAN 802.11ac(80M) 5.8G_Body_Right Edge_CH 155_0mm_ Ant1
Communication System: WLAN; Frequency: 5775 MHz; Duty cycle= 1:1.052
Medium parameters used: f = 5775 MHz; σ = 5.375 S/m; ε_r = 36.257; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.2°C; Liquid temperature: 22.1°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7754; ConvF(4.42, 4.42, 4.42); Calibrated: 2022/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1751; Calibrated: 2022/10/10
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (121x151x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.17 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.404 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 2.47 W/kg
SAR(1 g) = 0.448 W/kg; SAR(10 g) = 0.104 W/kg
Smallest distance from peaks to all points 3 dB below = 5.8 mm
Ratio of SAR at M2 to SAR at M1 = 50.8%
Maximum value of SAR (measured) = 0.937 W/kg



0 dB = 0.937 W/kg = -0.28 dBW/kg

11 SAR SYSTEM CHECK RESULTS

Date: 2023/8/8

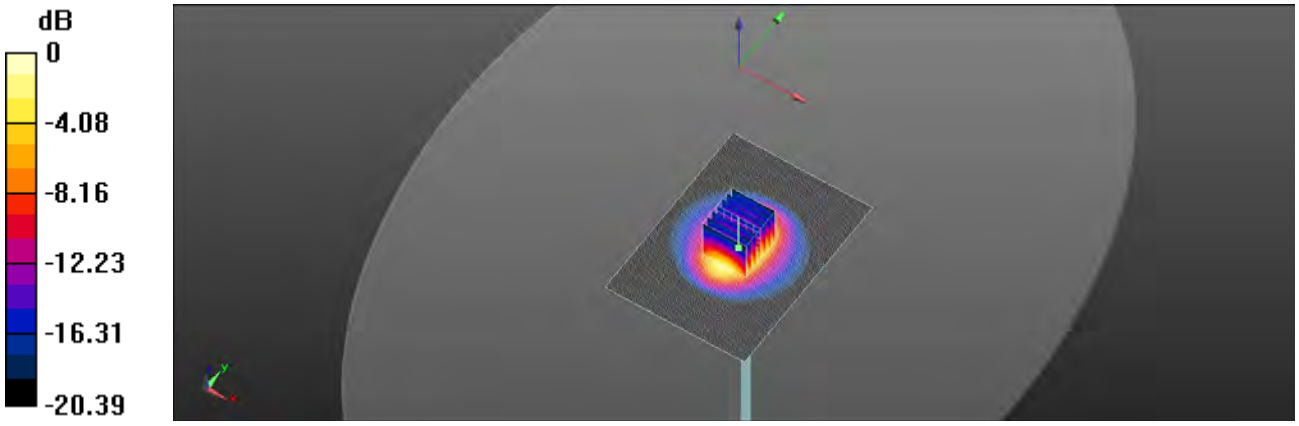
Report No. :TESA2307000445ES
Dipole 2450 MHz_SN:727
Communication System: CW; Frequency: 2450 MHz; Duty cycle= 1:1
Medium parameters used: f = 2450 MHz; σ = 1.847 S/m; ε_r = 40.148; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7754; ConvF(7.45, 7.45, 7.45); Calibrated: 2022/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1751; Calibrated: 2022/10/10
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (81x111x1): Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 21.8 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 113.1 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 26.8 W/kg
SAR(1 g) = 13.2 W/kg; SAR(10 g) = 6.43 W/kg
Smallest distance from peaks to all points 3 dB below = 10 mm
Ratio of SAR at M2 to SAR at M1 = 49.2%
Maximum value of SAR (measured) = 19.9 W/kg



0 dB = 19.9 W/kg = 12.99 dBW/kg

Date: 2023/8/9

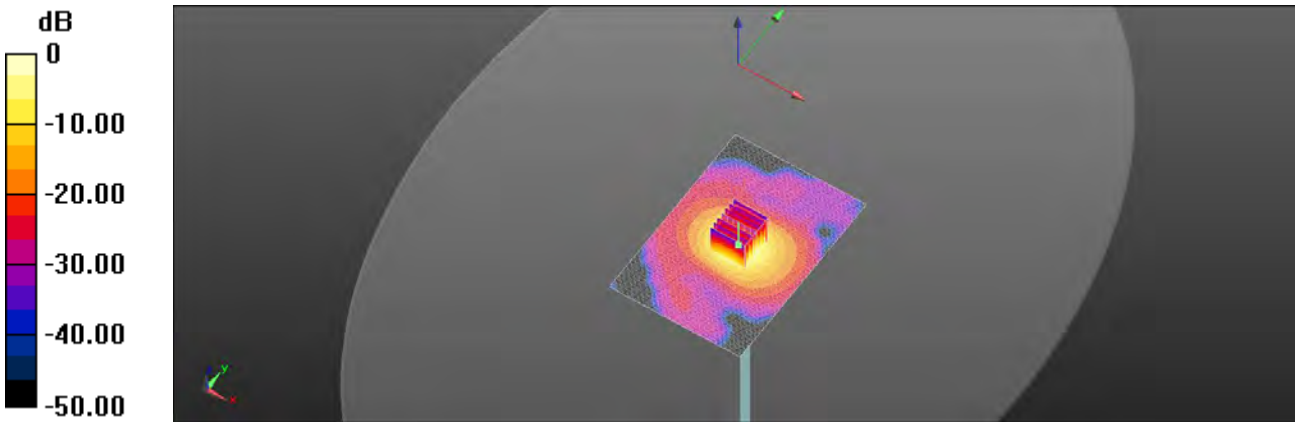
Report No. :TESA2307000445ES
Dipole 5250 MHz_SN:1023
Communication System: CW; Frequency: 5250 MHz; Duty cycle= 1:1
Medium parameters used: f = 5250 MHz; σ = 4.821 S/m; ε_r = 36.874; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.2°C; Liquid temperature: 22.1°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7754; ConvF(4.7, 4.7, 4.7); Calibrated: 2022/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1751; Calibrated: 2022/10/10
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (91x131x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 18.1 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 74.43 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 31.8 W/kg
SAR(1 g) = 8.25 W/kg; SAR(10 g) = 2.41 W/kg
Smallest distance from peaks to all points 3 dB below = 7.5 mm
Ratio of SAR at M2 to SAR at M1 = 56.5%
Maximum value of SAR (measured) = 17.0 W/kg



0 dB = 17.0 W/kg = 12.30 dBW/kg

Date: 2023/8/9

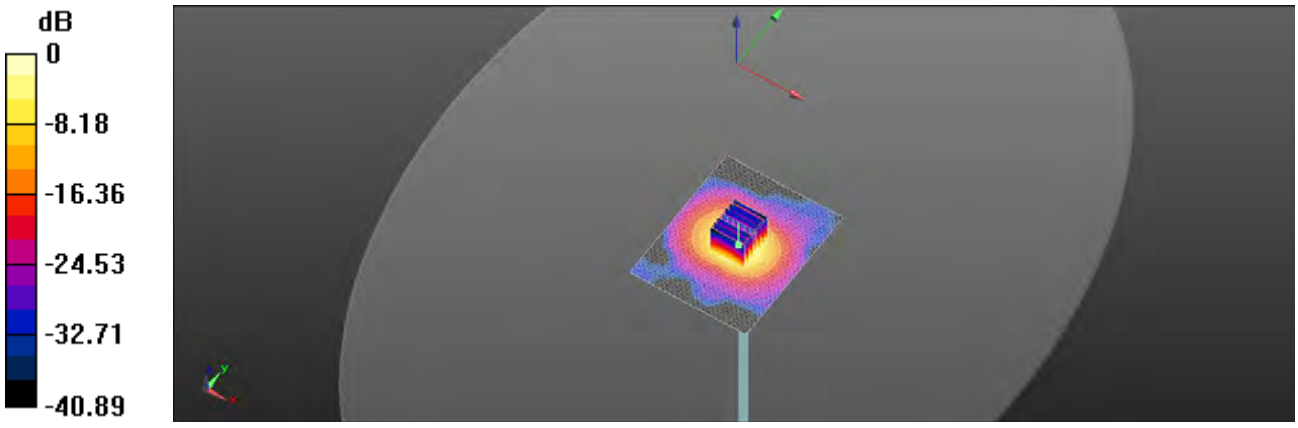
Report No. :TESA2307000445ES
Dipole 5750 MHz_SN:1023
Communication System: CW; Frequency: 5750 MHz; Duty cycle= 1:1
Medium parameters used: f = 5750 MHz; σ = 5.349 S/m; ε_r = 36.315; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.2°C; Liquid temperature: 22.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7754; ConvF(4.42, 4.42, 4.42); Calibrated: 2022/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1751; Calibrated: 2022/10/10
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (81x101x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 20.1 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 71.91 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 37.4 W/kg
SAR(1 g) = 8.59 W/kg; SAR(10 g) = 2.38 W/kg
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 52.5%
Maximum value of SAR (measured) = 18.2 W/kg



0 dB = 18.2 W/kg = 12.60 dBW/kg

12 APPENDIXES

Refer to separated files for the following appendixes.

12.1 SAR_Appendix A Photographs

12.2 SAR_Appendix B DAE & Probe Cal. Certificate

12.3 SAR_Appendix C Phantom Description & Dipole Cal. Certificate

- End of report -