RF Exposure report

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

Product Name	WiFi Low Energy & IEEE 802.11 a/b/g/n/ac/ax Module
Brand Name	Raytac
Model No.	AN7002Q-U
Family Model No.	AN7002Q-P, AN7002Q
Model Difference:	Refer to section1.3
Applicant	Raytac Corp. 8F, No.788-1, Zhongzheng Rd., Zhonghe Dist., New Taipei City, 235, Taiwan
Standards	IEEE/ANSI C95.1-1992, IEEE 1528-2013
FCC ID	SH6AN7002Q
Date of EUT Receipt	Jul. 16, 2025
Date of Test(s)	Jul. 20, 2025 ~ Jul. 28, 2025
Date of Issue	Aug. 05, 2025

Approved By / John Yeh

John Yeh

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.

Revision History

Report Number	Revision	Description	Issue Date	Revised By	Remark
TESA2507000556ES	00	Initial creation of document	Aug. 05, 2025	Cindy Chou	

Note:

1. The mark " * " is the revised version of the report due to comments submitted by the certification.
2. Variant information of model numbers is provided by the applicant, test results of this report are applicable to the sample EUT(s) received.
   And are assessed as electrically identical in RF characteristics, therefore, no further assessment required for the variant(s).

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	WiFi Low Energy & IEEE 802.11 a/b/g/n/ac/ax Module	
Brand Name	Raytac	
Model No.	AN7002Q-U	
Family Model No.	AN7002Q-P, AN7002Q	
Model Difference:	Refer to section1.3	
Duty Cycle	WLAN 802.11	Please refer to section 3
Supported radios (TX Frequency Range, MHz)	802.11 b/g/n/ax	2.4GHz (2400.0 – 2483.5 MHz)
	802.11a/n/ac/ax	5.2GHz (5150.0 –5250.0 MHz) 5.3GHz (5250.0 –5350.0 MHz) 5.6GHz (5470.0 – 5725.0 MHz) 5.8GHz (5725.0 – 5850.0 MHz) 5.9GHz (5850.0 – 5895.0 MHz)

1.3 Model Difference

Diversity Description	Original Model	Series Model	Series Model
	AN7002Q-U	AN7002Q-P	AN7002Q
Input Power	3.6V	O	O
Power Consumption	No	No	No
Brand Name / Trade Mark	Raytac	Raytac	Raytac
PCB Layout	No	No	No
Circuit Diagram	No	No	No
Components	External Dipole/Monopole	On board PIFA antenna	On board monopole antenna
Function	No	No	No
Size	16.4 x10.8x2.1mm	17.1x10.8x2.1mm	17.1x10.8x2.1mm

Note: Use "O" when it is the same as main model.

1.4 Maximum value

2344655-1(AN7002Q-U)

Summary of Maximum SAR Value	
Mode	Highest SAR 1g (W/kg)
2.4G WLAN	1.14
5G WLAN	1.18

SRF2W012(AN7002Q-U)

Summary of Maximum SAR Value	
Mode	Highest SAR 1g (W/kg)
2.4G WLAN	0.87
5G WLAN	1.18

1.5 Antenna Information

2344655-1

Vendor	TE Connectivity					
Antenna	Monopole					
Part Number	2344655-1					
Frequency(MHz)	2400~2500	5150~5250	5250~5350	5470~5725	5725~5850	5850~5895
Gain (dBi)	1.40	3.70	3.70	3.70	3.70	3.70
Note: Antenna information is provided by the applicant.						

SRF2W012

Vendor	Antenova					
Antenna	Dipole					
Part Number	SRF2W012-100					
Frequency(MHz)	2400~2500	5150~5250	5250~5350	5470~5725	5725~5850	5850~5895
Gain (dBi)	2.90	4.50	4.50	4.50	4.50	4.50
Note: Antenna information is provided by the applicant.						

2 MEASUREMENT SYSTEM

2.1 Test Facility

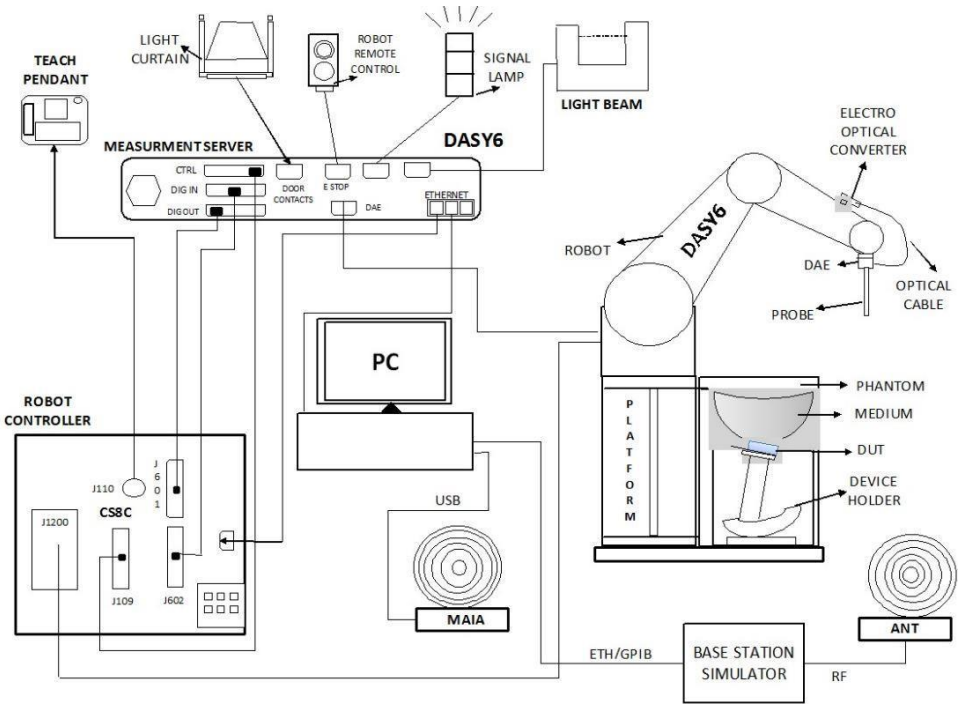
Laboratory	Test Site Address	Test Site Name	Test Engineer	PM	FCC Designation number	IC CAB identifier
SGS Taiwan Ltd. Central RF Lab. (TAF code 3702)	1F, No. 8, Alley 15, Lane 120, Sec. 1, NeiHu Road, Neihu District, Taipei City, 11493, Taiwan	SAR 2	-	-	TW0029	TW3702
		SAR 6	-	-		
		SAR 8	-	-		
	No. 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**	**Ender Lin**	**Bond Tsai**	TW0027	
		SAR 7	-	-		

Note: Test site name is remarked on a bolded mark as an indication where measurements occurred in specific test site and address.

2.2 SAR System

Block Diagram (DASY6)

The DASY system used for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Windows 10 and the DASY6 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

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 2450/5250/5600/5750/5850 MHz 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)

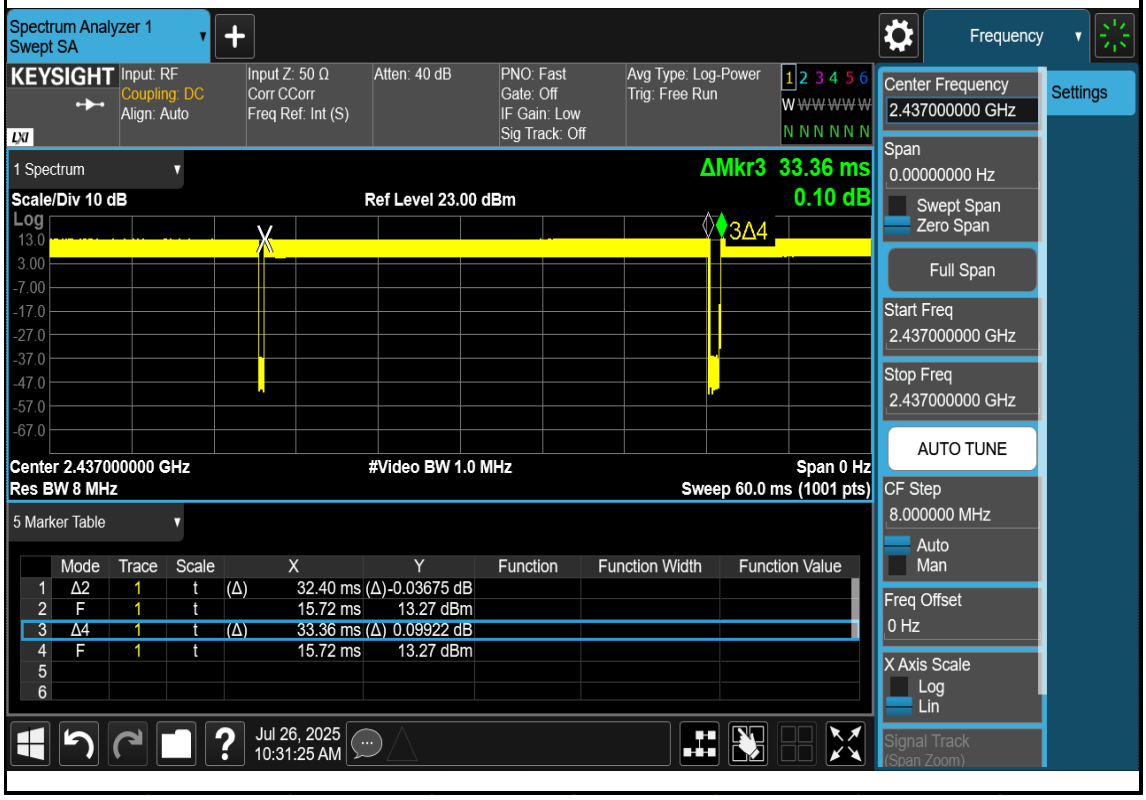
Model	ELI	
Construction	The ELI phantom is used for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance 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

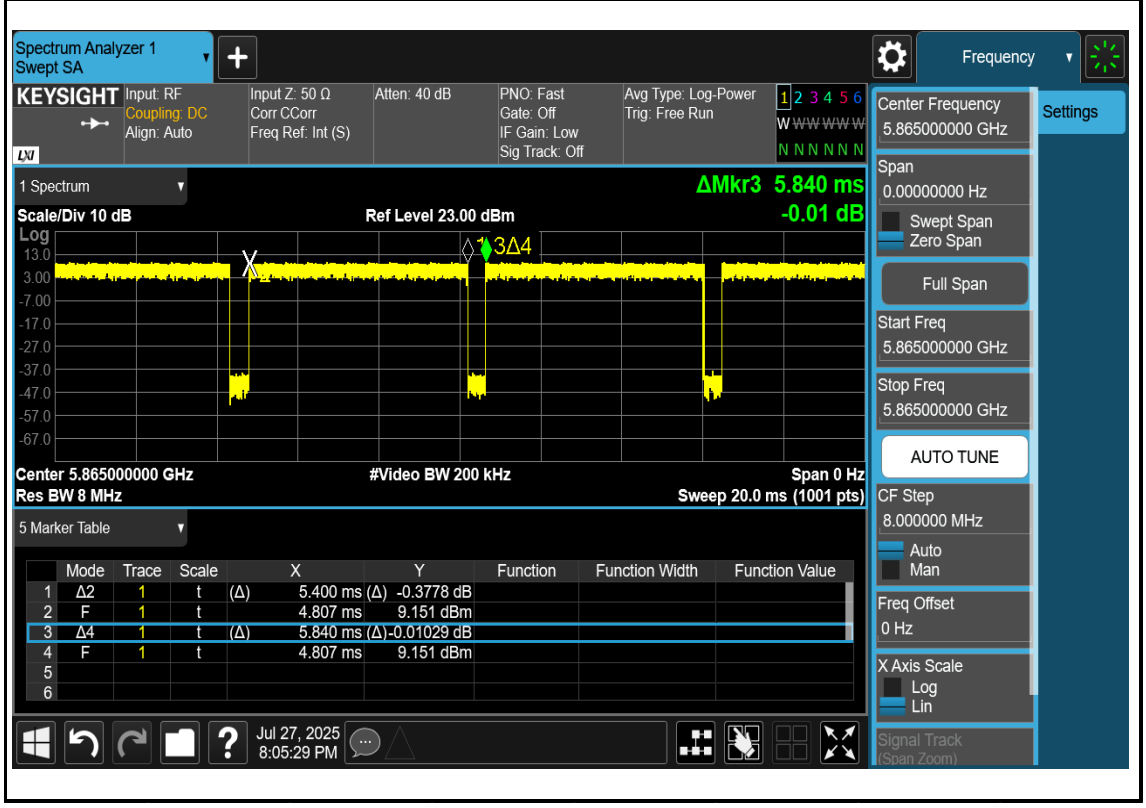
Construction	The device holder (Supporter) for Notebook is made by POM (polyoxymethylene resin) , which is non-metal and non-conductive. The height can be adjusted to fit varies kind of notebooks.	 Device Holder

3 DUTY CYCLE

2.4G b	(32.4/33.36=0.971) Scaling Factor=1.03



5G a	(5.4/5.84=0.925) Scaling Factor=1.08



4 SAR SYSTEM VERIFICATION

4.1 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.

4.2 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.

4.3 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
2412	39.276	1.767	39.762	1.792	1.24%	1.41%	± 5%	Jul. 26, 2025
2417	39.266	1.771	39.721	1.805	1.16%	1.92%	± 5%	
2437	39.226	1.789	39.609	1.826	0.98%	2.07%	± 5%	
2450	39.200	1.800	39.562	1.845	0.92%	2.50%	± 5%	
2457	39.191	1.807	39.558	1.853	0.94%	2.55%	± 5%	
2462	39.184	1.813	39.526	1.858	0.87%	2.48%	± 5%	
2467	39.177	1.818	39.521	1.867	0.88%	2.70%	± 5%	
2472	39.171	1.823	39.495	1.870	0.83%	2.58%	± 5%	
5180	36.020	4.639	35.819	4.619	-0.56%	-0.43%	± 5%	Jul. 27, 2025
5200	36.000	4.660	35.803	4.671	-0.55%	0.24%	± 5%	
5220	35.980	4.680	35.789	4.706	-0.53%	0.56%	± 5%	
5240	35.960	4.700	35.764	4.721	-0.55%	0.45%	± 5%	
5250	35.950	4.710	35.597	4.736	-0.98%	0.55%	± 5%	
5260	35.940	4.720	35.557	4.764	-1.07%	0.93%	± 5%	
5280	35.920	4.740	35.467	4.767	-1.26%	0.57%	± 5%	
5300	35.900	4.760	35.464	4.772	-1.21%	0.25%	± 5%	
5320	35.880	4.780	35.445	4.835	-1.21%	1.15%	± 5%	
5500	35.650	4.965	35.306	4.977	-0.96%	0.24%	± 5%	
5520	35.620	4.986	35.277	5.035	-0.96%	0.98%	± 5%	
5580	35.530	5.049	35.216	5.064	-0.88%	0.30%	± 5%	
5600	35.500	5.070	35.212	5.101	-0.81%	0.61%	± 5%	
5680	35.420	5.150	35.203	5.151	-0.61%	0.02%	± 5%	
5700	35.400	5.170	35.159	5.166	-0.68%	-0.08%	± 5%	Jul. 28, 2025
5720	35.380	5.190	35.101	5.174	-0.79%	-0.31%	± 5%	
5745	35.355	5.215	35.048	5.265	-0.87%	0.96%	± 5%	
5750	35.350	5.220	34.968	5.275	-1.08%	1.05%	± 5%	
5785	35.315	5.255	34.900	5.283	-1.18%	0.53%	± 5%	
5825	35.275	5.296	34.890	5.309	-1.09%	0.25%	± 5%	
5845	35.255	5.317	34.884	5.319	-1.05%	0.04%	± 5%	
5850	35.250	5.323	34.768	5.325	-1.37%	0.04%	± 5%	
5865	35.235	5.338	34.734	5.361	-1.42%	0.43%	± 5%	
5885	35.215	5.359	34.517	5.417	-1.98%	1.08%	± 5%	

4.4 The composition of the tissue simulating liquid:

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

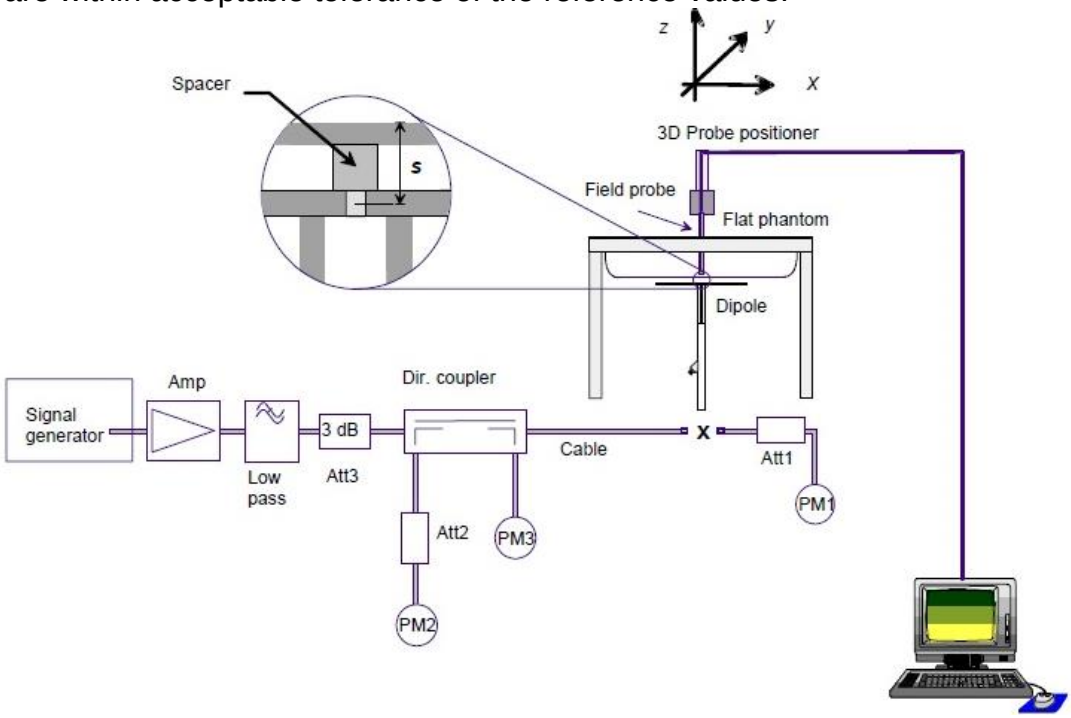
Broad-band head tissue simulating liquids	SPEAG Product	Frequency range (MHz)	Main Ingredients
	HBBL600-10000V6	600 - 10000	Water, Oil

4.5 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

4.6 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	52.6	12.1	48.4	-7.98	± 10%	Jul.26,2025
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	1349	5250	80.9	7.74	77.4	-4.33	± 10%	Jul.27,2025
D5GHzV2	1349	5600	82.4	8.52	85.2	3.40	± 10%	Jul.27,2025
D5GHzV2	1349	5750	80.8	8.56	85.6	5.94	± 10%	Jul.28,2025
D5GHzV2	1349	5850	79.9	7.97	79.7	-0.25	± 10%	Jul.28,2025

5 TEST CONFIGURATIONS

5.1 Test Environment

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

5.2 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. 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.

- **WLAN 5GHz:** Based on FCC guidance, general principles of KDB248227D01 can be applied to 802.11ax to determine initial test configuration with 802.11ax being considered as the highest 802.11 mode for the appropriate frequency band.

5.3 Test position

The device was tested for all surfaces with test distance 5mm.

5.4 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)

6 MAXIMUM OUTPUT POWER

6.1 WLAN

2344655-1

TE_2344655 (Monopole)						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
2.45GHz	802.11b	1	2412	1Mbps	13.00	12.93
		6	2437		13.00	12.88
		11	2462		13.00	12.86
	802.11g	1	2412	6Mbps	13.00	12.80
		6	2437		13.00	12.95
		11	2462		13.00	12.89
	802.11n20-HT0	1	2412	MCS0	13.00	12.99
		6	2437		13.00	12.90
		11	2462		13.00	12.94
	802.11ax20-HE0	1	2412	MCS0	13.00	12.87
		6	2437		13.00	12.88
		11	2462		13.50	13.33

TE_2344655 (Monopole)						
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	15.00	14.85
		44	5220		15.00	14.69
		48	5240		15.00	14.74
	802.11n20-HT0	36	5180	MCS0	15.00	14.68
		44	5220		15.00	14.71
		48	5240		15.00	14.69
	802.11ac20-VHT0	36	5180	MCS0	15.00	14.56
		44	5220		15.00	14.59
		48	5240		15.00	14.53
	802.11ax20-HE0	36	5180	MCS0	15.00	14.96
		44	5220		15.00	14.73
		48	5240		15.00	14.78

TE_2344655 (Monopole)						
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	15.00	14.79
		60	5300		15.00	14.88
		64	5320		15.00	14.95
	802.11n20-HT0	52	5260	MCS0	15.00	14.91
		60	5300		15.00	14.94
		64	5320		15.00	14.89
	802.11ac20-VHT0	52	5260	MCS0	15.00	14.79
		60	5300		15.00	14.75
		64	5320		15.00	14.71
	802.11ax20-HE0	52	5260	MCS0	15.00	14.77
		60	5300		15.00	14.88
		64	5320		15.00	14.92
TE_2344655 (Monopole)						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.6GHz	802.11a	100	5500	6Mbps	15.00	14.81
		140	5700		15.00	14.94
		144	5720		15.00	14.92
	802.11n20-HT0	100	5500	MCS0	15.00	14.92
		140	5700		15.00	14.87
		144	5720		15.00	14.90
	802.11ac20-VHT0	100	5500	MCS0	15.00	14.80
		140	5700		15.00	14.68
		144	5720		15.00	14.66
	802.11ax20-HE0	100	5500	MCS0	15.00	14.83
		140	5700		15.00	14.81
		144	5720		15.00	14.74

TE_2344655 (Monopole)						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.8GHz	802.11a	149	5745	6Mbps	15.00	14.93
		157	5785		15.00	14.85
		165	5825		15.00	14.91
	802.11n20-HT0	149	5745	MCS0	15.00	14.73
		157	5785		15.00	14.80
		165	5825		15.00	14.69
	802.11ac20-VHT0	149	5745	MCS0	15.00	14.52
		157	5785		15.00	14.61
		165	5825		15.00	14.63
	802.11ax20-HE0	149	5745	MCS0	15.00	14.87
		157	5785		15.00	14.80
		165	5825		15.00	14.90

TE_2344655 (Monopole)						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.9GHz	802.11a	169	5845	6Mbps	15.00	14.79
		173	5865		15.00	14.86
		177	5885		15.00	14.88
	802.11n20-HT0	169	5845	MCS0	15.00	14.82
		173	5865		15.00	14.66
		177	5885		15.00	14.88
	802.11ac20-VHT0	169	5845	MCS0	15.00	14.68
		173	5865		15.00	14.59
		177	5885		15.00	14.74
	802.11ax20-HE0	169	5845	MCS0	15.00	14.86
		173	5865		15.00	14.91
		177	5885		15.00	14.88

SRF2W012

Antenova_SRF2W012						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
2.45GHz	802.11b	1	2412	1Mbps	13.00	12.88
		6	2437		13.00	12.83
		11	2462		13.00	12.87
	802.11g	1	2412	6Mbps	13.00	12.97
		6	2437		13.00	12.81
		11	2462		13.00	12.85
	802.11n20-HT0	1	2412	MCS0	13.00	12.87
		6	2437		13.00	12.99
		11	2462		13.00	12.83
	802.11ax20-HE0	1	2412	MCS0	13.00	12.85
		6	2437		13.00	12.95
		11	2462		13.50	13.48

Antenova_SRF2W012						
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	13.00	12.99
		44	5220		13.00	12.95
		48	5240		13.00	12.89
	802.11n20-HT0	36	5180	MCS0	13.00	12.67
		44	5220		13.00	12.67
		48	5240		13.00	12.79
	802.11ac20-VHT0	36	5180	MCS0	13.00	12.66
		44	5220		13.00	12.83
		48	5240		13.00	12.81
	802.11ax20-HE0	36	5180	MCS0	13.00	12.78
		44	5220		13.00	12.66
		48	5240		13.00	12.77

Antenova_SRF2W012						
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	12.00	11.95
		60	5300		12.00	11.91
		64	5320		12.00	11.96
	802.11n20-HT0	52	5260	MCS0	12.00	11.65
		60	5300		12.00	11.80
		64	5320		12.00	11.82
	802.11ac20-VHT0	52	5260	MCS0	12.00	11.65
		60	5300		12.00	11.67
		64	5320		12.00	11.70
	802.11ax20-HE0	52	5260	MCS0	12.00	11.79
		60	5300		12.00	11.70
		64	5320		12.00	11.66

Antenova_SRF2W012						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.6GHz	802.11a	100	5500	6Mbps	12.00	11.93
		140	5700		12.00	12.00
		144	5720		12.00	11.90
	802.11n20-HT0	100	5500	MCS0	12.00	11.81
		140	5700		12.00	11.67
		144	5720		12.00	11.77
	802.11ac20-VHT0	100	5500	MCS0	12.00	11.65
		140	5700		12.00	11.72
		144	5720		12.00	11.72
	802.11ax20-HE0	100	5500	MCS0	12.00	11.64
		140	5700		12.00	11.68
		144	5720		12.00	11.67

Antenova_SRF2W012						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.8GHz	802.11a	149	5745	6Mbps	12.00	11.82
		157	5785		12.00	11.78
		165	5825		12.00	11.74
	802.11n20-HT0	149	5745	MCS0	12.00	11.65
		157	5785		12.00	11.81
		165	5825		12.00	11.77
	802.11ac20-VHT0	149	5745	MCS0	12.00	11.65
		157	5785		12.00	11.74
		165	5825		12.00	11.74
	802.11ax20-HE0	149	5745	MCS0	12.00	11.71
		157	5785		12.00	11.69
		165	5825		12.00	11.65

Antenova_SRF2W012						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
5.9GHz	802.11a	169	5845	6Mbps	13.00	12.77
		173	5865		13.00	12.85
		177	5885		13.00	12.79
	802.11n20-HT0	169	5845	MCS0	13.00	12.60
		173	5865		13.00	12.70
		177	5885		13.00	12.73
	802.11ac20-VHT0	169	5845	MCS0	13.00	12.64
		173	5865		13.00	12.61
		177	5885		13.00	12.60
	802.11ax20-HE0	169	5845	MCS0	13.00	12.67
		173	5865		13.00	12.60
		177	5885		13.00	12.70

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

2344655-1

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 802.11ax(20M) 2.4G	TE_2344655 (Monopole)	Front Surface	5	11	2462	13.50	13.33	1.00	103.99%	1.010	1.050	-
WLAN 802.11ax(20M) 2.4G	TE_2344655 (Monopole)	Back Surface	5	1	2412	13.00	12.87	1.00	103.04%	1.040	1.072	-
WLAN 802.11ax(20M) 2.4G	TE_2344655 (Monopole)	Back Surface	5	6	2437	13.00	12.88	1.00	102.80%	1.110	1.141	001
WLAN 802.11ax(20M) 2.4G	TE_2344655 (Monopole)	Back Surface	5	11	2462	13.50	13.33	1.00	103.99%	1.070	1.113	-
WLAN 802.11ax(20M) 2.4G	TE_2344655 (Monopole)	Top Edge	5	11	2462	13.50	13.33	1.00	103.99%	0.047	0.049	-
WLAN 802.11ax(20M) 2.4G	TE_2344655 (Monopole)	Bottom Edge	5	11	2462	13.50	13.33	1.00	103.99%	0.058	0.060	-
WLAN 802.11ax(20M) 2.4G	TE_2344655 (Monopole)	Right Edge	5	11	2462	13.50	13.33	1.00	103.99%	0.379	0.394	-
WLAN 802.11ax(20M) 2.4G	TE_2344655 (Monopole)	Left Edge	5	11	2462	13.50	13.33	1.00	103.99%	0.217	0.226	-
Repeat	TE_2344655 (Monopole)	Back Surface	5	6	2437	13.50	13.33	1.03	103.99%	1.020	1.093	-

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 802.11a 5.2G	TE_2344655 (Monopole)	Front Surface	5	36	5180	15.00	14.85	1.08	103.56%	0.648	0.725	-
WLAN 802.11a 5.2G	TE_2344655 (Monopole)	Back Surface	5	36	5180	15.00	14.85	1.08	103.56%	0.667	0.746	002
WLAN 802.11a 5.2G	TE_2344655 (Monopole)	Back Surface	5	44	5220	15.00	14.69	1.08	107.44%	0.624	0.724	-
WLAN 802.11a 5.2G	TE_2344655 (Monopole)	Back Surface	5	48	5240	15.00	14.74	1.08	106.21%	0.646	0.741	-
WLAN 802.11a 5.2G	TE_2344655 (Monopole)	Top Edge	5	36	5180	15.00	14.85	1.08	103.56%	0.084	0.094	-
WLAN 802.11a 5.2G	TE_2344655 (Monopole)	Bottom Edge	5	36	5180	15.00	14.85	1.08	103.56%	0.115	0.129	-
WLAN 802.11a 5.2G	TE_2344655 (Monopole)	Right Edge	5	36	5180	15.00	14.85	1.08	103.56%	0.295	0.330	-
WLAN 802.11a 5.2G	TE_2344655 (Monopole)	Left Edge	5	36	5180	15.00	14.85	1.08	103.56%	0.341	0.381	-

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 802.11a 5.3G	TE_2344655 (Monopole)	Front Surface	5	64	5320	15.00	14.95	1.08	101.20%	0.947	1.035	-
WLAN 802.11a 5.3G	TE_2344655 (Monopole)	Back Surface	5	52	5260	15.00	14.79	1.08	105.00%	0.979	1.110	-
WLAN 802.11a 5.3G	TE_2344655 (Monopole)	Back Surface	5	60	5300	15.00	14.88	1.08	102.84%	1.010	1.122	-
WLAN 802.11a 5.3G	TE_2344655 (Monopole)	Back Surface	5	64	5320	15.00	14.95	1.08	101.20%	1.030	1.126	003
WLAN 802.11a 5.3G	TE_2344655 (Monopole)	Top Edge	5	64	5320	15.00	14.95	1.08	101.20%	0.060	0.066	-
WLAN 802.11a 5.3G	TE_2344655 (Monopole)	Bottom Edge	5	64	5320	15.00	14.95	1.08	101.20%	0.093	0.102	-
WLAN 802.11a 5.3G	TE_2344655 (Monopole)	Right Edge	5	64	5320	15.00	14.95	1.08	101.20%	0.436	0.477	-
WLAN 802.11a 5.3G	TE_2344655 (Monopole)	Left Edge	5	64	5320	15.00	14.95	1.08	101.20%	0.488	0.533	-
Repeat	TE_2344655 (Monopole)	Back Surface	5	64	5320	15.00	14.95	1.08	101.20%	0.993	1.085	-

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 802.11a 5.6G	TE_2344655 (Monopole)	Front Surface	5	140	5700	15.00	14.94	1.08	101.43%	0.849	0.930	-
WLAN 802.11a 5.6G	TE_2344655 (Monopole)	Back Surface	5	100	5500	15.00	14.81	1.08	104.51%	0.993	1.121	-
WLAN 802.11a 5.6G	TE_2344655 (Monopole)	Back Surface	5	140	5700	15.00	14.94	1.08	101.43%	1.080	1.183	004
WLAN 802.11a 5.6G	TE_2344655 (Monopole)	Back Surface	5	144	5720	15.00	14.92	1.08	101.90%	1.010	1.112	-
WLAN 802.11a 5.6G	TE_2344655 (Monopole)	Top Edge	5	140	5700	15.00	14.94	1.08	101.43%	0.065	0.071	-
WLAN 802.11a 5.6G	TE_2344655 (Monopole)	Bottom Edge	5	140	5700	15.00	14.94	1.08	101.43%	0.073	0.080	-
WLAN 802.11a 5.6G	TE_2344655 (Monopole)	Right Edge	5	140	5700	15.00	14.94	1.08	101.43%	0.788	0.863	-
WLAN 802.11a 5.6G	TE_2344655 (Monopole)	Left Edge	5	140	5700	15.00	14.94	1.08	101.43%	0.762	0.835	-
Repeat	TE_2344655 (Monopole)	Back Surface	5	140	5700	15.00	14.94	1.08	101.43%	1.020	1.117	-

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 802.11a 5.8G	TE_2344655 (Monopole)	Front Surface	5	149	5745	15.00	14.93	1.08	101.67%	0.864	0.949	-
WLAN 802.11a 5.8G	TE_2344655 (Monopole)	Back Surface	5	149	5745	15.00	14.93	1.08	101.67%	1.040	1.142	005
WLAN 802.11a 5.8G	TE_2344655 (Monopole)	Back Surface	5	157	5785	15.00	14.85	1.08	103.56%	1.010	1.130	-
WLAN 802.11a 5.8G	TE_2344655 (Monopole)	Back Surface	5	165	5825	15.00	14.91	1.08	102.13%	0.998	1.101	-
WLAN 802.11a 5.8G	TE_2344655 (Monopole)	Top Edge	5	149	5745	15.00	14.93	1.08	101.67%	0.094	0.103	-
WLAN 802.11a 5.8G	TE_2344655 (Monopole)	Bottom Edge	5	149	5745	15.00	14.93	1.08	101.67%	0.139	0.153	-
WLAN 802.11a 5.8G	TE_2344655 (Monopole)	Right Edge	5	149	5745	15.00	14.93	1.08	101.67%	0.771	0.847	-
WLAN 802.11a 5.8G	TE_2344655 (Monopole)	Left Edge	5	149	5745	15.00	14.93	1.08	101.67%	0.645	0.708	-
Repeat	TE_2344655 (Monopole)	Back Surface	5	149	5745	15.00	14.93	1.08	101.67%	0.988	1.085	-

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 802.11a 5.9G	TE_2344655 (Monopole)	Front Surface	5	177	5885	15.00	14.88	1.08	102.84%	0.751	0.834	-
WLAN 802.11a 5.9G	TE_2344655 (Monopole)	Back Surface	5	169	5845	15.00	14.79	1.08	105.00%	0.779	0.883	-
WLAN 802.11a 5.9G	TE_2344655 (Monopole)	Back Surface	5	173	5865	15.00	14.86	1.08	103.32%	0.812	0.906	-
WLAN 802.11a 5.9G	TE_2344655 (Monopole)	Back Surface	5	177	5885	15.00	14.88	1.08	102.84%	0.834	0.926	006
WLAN 802.11a 5.9G	TE_2344655 (Monopole)	Top Edge	5	177	5885	15.00	14.88	1.08	102.84%	0.066	0.073	-
WLAN 802.11a 5.9G	TE_2344655 (Monopole)	Bottom Edge	5	177	5885	15.00	14.88	1.08	102.84%	0.169	0.188	-
WLAN 802.11a 5.9G	TE_2344655 (Monopole)	Right Edge	5	177	5885	15.00	14.88	1.08	102.84%	0.595	0.661	-
WLAN 802.11a 5.9G	TE_2344655 (Monopole)	Left Edge	5	177	5885	15.00	14.88	1.08	102.84%	0.612	0.680	-
Repeat	TE_2344655 (Monopole)	Back Surface	5	177	5885	15.00	14.88	1.08	102.84%	0.815	0.905	-

Note: * - repeated at the highest SAR measurement according to the KDB 865664 D01

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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 802.11ax(20M) 2.4G	Antenova_SRF2W012	Front Surface	5	11	2462	13.50	13.48	1.00	100.46%	0.582	0.585	-
WLAN 802.11ax(20M) 2.4G	Antenova_SRF2W012	Back Surface	5	1	2412	13.00	12.85	1.00	103.51%	0.842	0.872	-
WLAN 802.11ax(20M) 2.4G	Antenova_SRF2W012	Back Surface	5	6	2437	13.00	12.95	1.00	101.16%	0.817	0.826	-
WLAN 802.11ax(20M) 2.4G	Antenova_SRF2W012	Back Surface	5	11	2462	13.50	13.48	1.00	100.46%	0.858	0.862	007
WLAN 802.11ax(20M) 2.4G	Antenova_SRF2W012	Top Edge	5	11	2462	13.50	13.48	1.00	100.46%	0.553	0.556	-
WLAN 802.11ax(20M) 2.4G	Antenova_SRF2W012	Bottom Edge	5	11	2462	13.50	13.48	1.00	100.46%	0.274	0.275	-
WLAN 802.11ax(20M) 2.4G	Antenova_SRF2W012	Right Edge	5	11	2462	13.50	13.48	1.00	100.46%	0.013	0.013	-
WLAN 802.11ax(20M) 2.4G	Antenova_SRF2W012	Left Edge	5	11	2462	13.50	13.48	1.00	100.46%	0.017	0.017	-
Repeat	Antenova_SRF2W012	Back Surface	5	11	2462	13.50	13.48	1.03	100.46%	0.826	0.855	-
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 802.11a 5.2G	Antenova_SRF2W012	Front Surface	5	36	5180	13.00	12.99	1.08	100.23%	0.776	0.840	-
WLAN 802.11a 5.2G	Antenova_SRF2W012	Back Surface	5	36	5180	13.00	12.99	1.08	100.23%	1.040	1.126	008
WLAN 802.11a 5.2G	Antenova_SRF2W012	Back Surface	5	44	5220	13.00	12.95	1.08	101.16%	1.010	1.103	-
WLAN 802.11a 5.2G	Antenova_SRF2W012	Back Surface	5	48	5240	13.00	12.89	1.08	102.57%	0.998	1.105	-
WLAN 802.11a 5.2G	Antenova_SRF2W012	Top Edge	5	36	5180	13.00	12.99	1.08	100.23%	0.736	0.797	-
WLAN 802.11a 5.2G	Antenova_SRF2W012	Bottom Edge	5	36	5180	13.00	12.99	1.08	100.23%	0.345	0.373	-
WLAN 802.11a 5.2G	Antenova_SRF2W012	Right Edge	5	36	5180	13.00	12.99	1.08	100.23%	0.062	0.067	-
WLAN 802.11a 5.2G	Antenova_SRF2W012	Left Edge	5	36	5180	13.00	12.99	1.08	100.23%	0.069	0.075	-
Repeat	Antenova_SRF2W012	Back Surface	5	36	5180	13.00	12.99	1.08	100.23%	1.020	1.104	-
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 802.11a 5.3G	Antenova_SRF2W012	Front Surface	5	64	5320	12.00	11.96	1.08	100.93%	0.687	0.749	-
WLAN 802.11a 5.3G	Antenova_SRF2W012	Back Surface	5	52	5260	12.00	11.95	1.08	101.16%	0.957	1.046	-
WLAN 802.11a 5.3G	Antenova_SRF2W012	Back Surface	5	60	5300	12.00	11.91	1.08	102.09%	0.983	1.084	-
WLAN 802.11a 5.3G	Antenova_SRF2W012	Back Surface	5	64	5320	12.00	11.96	1.08	100.93%	1.010	1.101	009
WLAN 802.11a 5.3G	Antenova_SRF2W012	Top Edge	5	64	5320	12.00	11.96	1.08	100.93%	0.651	0.710	-
WLAN 802.11a 5.3G	Antenova_SRF2W012	Bottom Edge	5	64	5320	12.00	11.96	1.08	100.93%	0.305	0.332	-
WLAN 802.11a 5.3G	Antenova_SRF2W012	Right Edge	5	64	5320	12.00	11.96	1.08	100.93%	0.060	0.065	-
WLAN 802.11a 5.3G	Antenova_SRF2W012	Left Edge	5	64	5320	12.00	11.96	1.08	100.93%	0.067	0.073	-
Repeat	Antenova_SRF2W012	Back Surface	5	64	5320	12.00	11.96	1.08	100.93%	0.988	1.077	-
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 802.11a 5.6G	Antenova_SRF2W012	Front Surface	5	140	5700	12.00	12.00	1.08	100.00%	0.826	0.892	-
WLAN 802.11a 5.6G	Antenova_SRF2W012	Back Surface	5	100	5500	12.00	11.93	1.08	101.62%	1.060	1.163	-
WLAN 802.11a 5.6G	Antenova_SRF2W012	Back Surface	5	140	5700	12.00	12.00	1.08	100.00%	1.010	1.091	-
WLAN 802.11a 5.6G	Antenova_SRF2W012	Back Surface	5	144	5720	12.00	11.90	1.08	102.33%	1.070	1.183	010
WLAN 802.11a 5.6G	Antenova_SRF2W012	Top Edge	5	140	5700	12.00	12.00	1.08	100.00%	0.786	0.849	-
WLAN 802.11a 5.6G	Antenova_SRF2W012	Bottom Edge	5	140	5700	12.00	12.00	1.08	100.00%	0.367	0.396	-
WLAN 802.11a 5.6G	Antenova_SRF2W012	Right Edge	5	140	5700	12.00	12.00	1.08	100.00%	0.067	0.072	-
WLAN 802.11a 5.6G	Antenova_SRF2W012	Left Edge	5	140	5700	12.00	12.00	1.08	100.00%	0.074	0.080	-
Repeat	Antenova_SRF2W012	Back Surface	5	140	5700	12.00	12.00	1.08	100.00%	1.050	1.134	-
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 802.11a 5.8G	Antenova_SRF2W012	Front Surface	5	149	5745	12.00	11.82	1.08	104.23%	0.788	0.887	-
WLAN 802.11a 5.8G	Antenova_SRF2W012	Back Surface	5	149	5745	12.00	11.82	1.08	104.23%	1.050	1.182	011
WLAN 802.11a 5.8G	Antenova_SRF2W012	Back Surface	5	157	5785	12.00	11.78	1.08	105.20%	1.020	1.159	-
WLAN 802.11a 5.8G	Antenova_SRF2W012	Back Surface	5	165	5825	12.00	11.74	1.08	106.17%	1.030	1.181	-
WLAN 802.11a 5.8G	Antenova_SRF2W012	Top Edge	5	149	5745	12.00	11.82	1.08	104.23%	0.747	0.841	-
WLAN 802.11a 5.8G	Antenova_SRF2W012	Bottom Edge	5	149	5745	12.00	11.82	1.08	104.23%	0.350	0.394	-
WLAN 802.11a 5.8G	Antenova_SRF2W012	Right Edge	5	149	5745	12.00	11.82	1.08	104.23%	0.068	0.077	-
WLAN 802.11a 5.8G	Antenova_SRF2W012	Left Edge	5	149	5745	12.00	11.82	1.08	104.23%	0.073	0.082	-
Repeat	Antenova_SRF2W012	Back Surface	5	149	5745	12.00	11.82	1.08	104.23%	1.040	1.171	-
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 802.11a 5.9G	Antenova_SRF2W012	Front Surface	5	173	5865	13.00	12.85	1.08	103.51%	0.869	0.972	-
WLAN 802.11a 5.9G	Antenova_SRF2W012	Back Surface	5	169	5845	13.00	12.77	1.08	105.44%	1.000	1.139	-
WLAN 802.11a 5.9G	Antenova_SRF2W012	Back Surface	5	173	5865	13.00	12.85	1.08	103.51%	1.040	1.163	012
WLAN 802.11a 5.9G	Antenova_SRF2W012	Back Surface	5	177	5885	13.00	12.79	1.08	104.95%	0.995	1.128	-
WLAN 802.11a 5.9G	Antenova_SRF2W012	Top Edge	5	173	5865	13.00	12.85	1.08	103.51%	0.798	0.892	-
WLAN 802.11a 5.9G	Antenova_SRF2W012	Bottom Edge	5	173	5865	13.00	12.85	1.08	103.51%	0.358	0.400	-
WLAN 802.11a 5.9G	Antenova_SRF2W012	Right Edge	5	173	5865	13.00	12.85	1.08	103.51%	0.059	0.066	-
WLAN 802.11a 5.9G	Antenova_SRF2W012	Left Edge	5	173	5865	13.00	12.85	1.08	103.51%	0.069	0.077	-
Repeat	Antenova_SRF2W012	Back Surface	5	173	5865	13.00	12.85	1.08	103.51%	1.020	1.140	-

Note: * - repeated at the highest SAR measurement according to the KDB 865664 D01

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	1719	Jan/20/2025	Jan/19/2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	7686	Oct/07/2024	Oct/06/2025
SPEAG	System Validation Dipole	D2450V2	727	Apr/15/2025	Apr/14/2026
SPEAG	System Validation Dipole	D5GHzV2	1349	Mar/19/2024	Mar/18/2027
SPEAG	Dielectric Assessment Kit	DAKS-3.5	1053	Feb/17/2025	Feb/16/2026
Keysight	EXA Signal Analyzer	N9010B	MY59071573	Jun/03/2025	Jun/02/2026
R&S	MXG Analog Signal Generator	SMB100A03	182996	Apr/19/2025	Apr/18/2026
Agilent	Dual-directional coupler	772D	MY52180142	Oct/30/2024	Oct/29/2025
Agilent	Dual-directional coupler	778D	MY52180302	Nov/06/2024	Nov/05/2025
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 Meter	NRX	102034	Dec/27/2024	Dec/26/2025
R&S	Power Sensor	NRP18S	101974	Nov/11/2024	Nov/10/2025
R&S	Power Sensor	NRP18S	109066	Oct/28/2024	Oct/27/2025
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	Nov/11/2024	Nov/10/2025
TECPEL	Digital thermometer	DTM-303A	TP130074	May/15/2025	May/14/2026

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.)	1.98%	N	1	1	0.64	0.43	1.27%	0.85%	M
Liquid Conductivity (mea.)	1.15%	N	1	1	0.6	0.49	0.69%	0.56%	M
Combined standard uncertainty		RSS					11.80%	11.75%	
Expant uncertainty (95% confidence interval), K=2							23.61%	23.50%	

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.)	1.24%	N	1	1	0.64	0.43	0.79%	0.53%	M
Liquid Conductivity (mea.)	2.70%	N	1	1	0.6	0.49	1.62%	1.32%	M
Combined standard uncertainty		RSS					11.56%	11.50%	
Expant uncertainty (95% confidence interval), K=2							23.12%	22.99%	

10 SAR MEASUREMENT RESULTS

Date: 2025/7/26

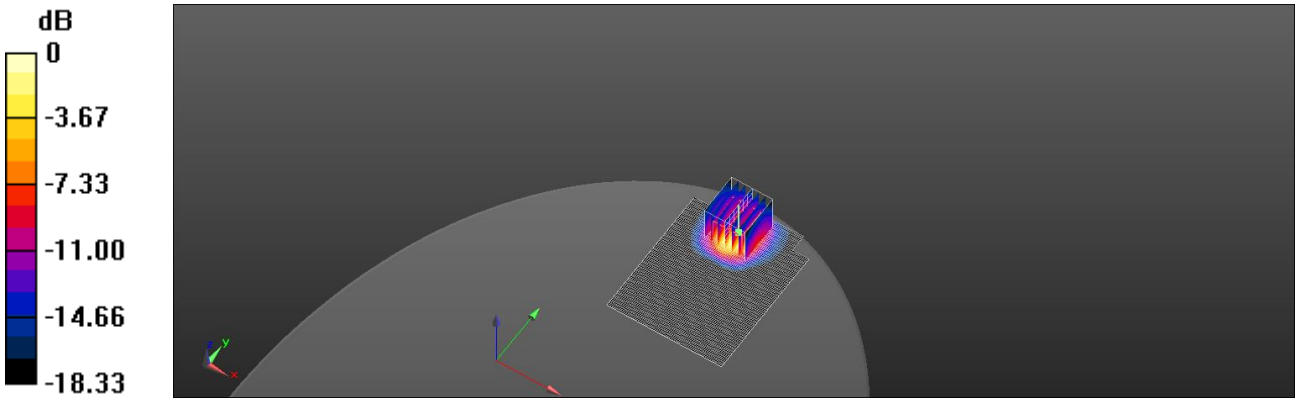
ID: 001
Report No. :TESA2507000556ES
WLAN 802.11ax(20M)_Body_Back Surface_CH 6_5mm_TE_2344655 (Monopole)
Communication System: WLAN; Frequency: 2437 MHz;Duty Cycle: 1:1.03
Medium parameters used: f = 2437 MHz; σ = 1.826 S/m; εr = 39.609; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.6°C; Liquid temperature: 22.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(7.73, 7.08, 7.39) @ 2437 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x101x1): Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 1.92 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.967 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 2.28 W/kg
SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.543 W/kg
Smallest distance from peaks to all points 3 dB below = 8.2 mm
Ratio of SAR at M2 to SAR at M1 = 55.4%
Maximum value of SAR (measured) = 1.90 W/kg



0 dB = 1.90 W/kg = 2.78 dBW/kg

Date: 2025/7/27

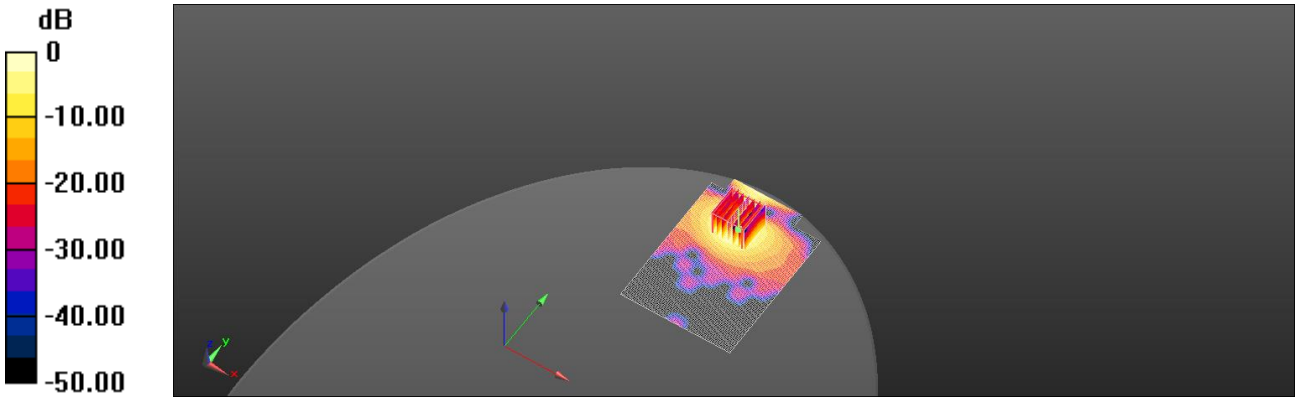
ID: 002
Report No. :TESA2507000556ES
WLAN 802.11a 5.2G_Body_Back Surface_CH 36_5mm _TE_2344655 (Monopole)
Communication System: WLAN; Frequency: 5180 MHz;Duty Cycle: 1:1.08
Medium parameters used: f = 5180 MHz; σ = 4.619 S/m; εr = 35.819; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.7°C; Liquid temperature: 22.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(6.25, 5.72, 5.98) @ 5180 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (81x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.68 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 9.666 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 2.80 W/kg
SAR(1 g) = 0.667 W/kg; SAR(10 g) = 0.199 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 52.3%
Maximum value of SAR (measured) = 1.62 W/kg



0 dB = 1.62 W/kg = 2.09 dBW/kg

Date: 2025/7/27

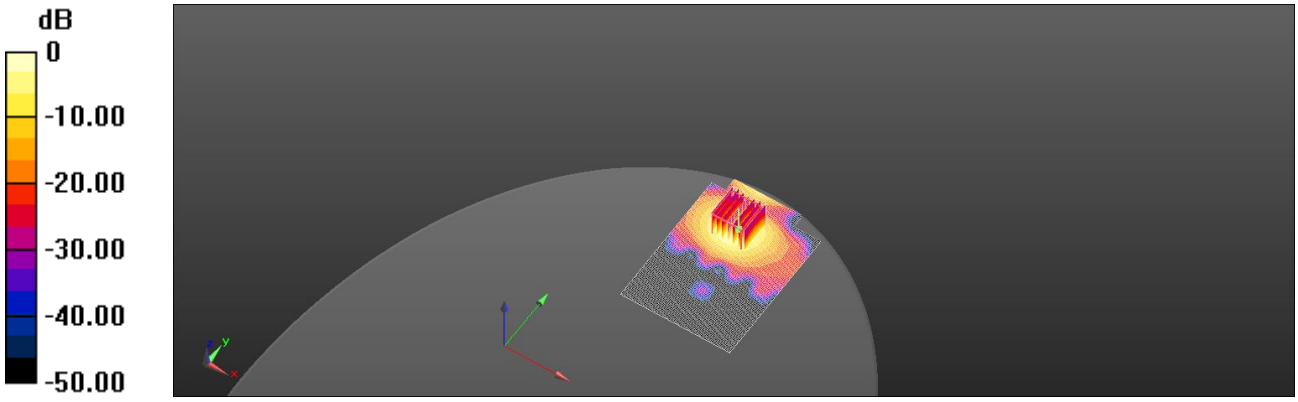
ID: 003
Report No. :TESA2507000556ES
WLAN 802.11a 5.3G_Body_Back Surface_CH 64_5mm _TE_2344655 (Monopole)
Communication System: WLAN; Frequency: 5320 MHz;Duty Cycle: 1:1.08
Medium parameters used: f = 5320 MHz; σ = 4.835 S/m; εr = 35.445; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.7°C; Liquid temperature: 22.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(6.25, 5.72, 5.98) @ 5320 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (81x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 2.58 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 11.73 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 4.38 W/kg
SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.313 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 51.9%
Maximum value of SAR (measured) = 2.53 W/kg



0 dB = 2.53 W/kg = 4.03 dBW/kg

Date: 2025/7/28

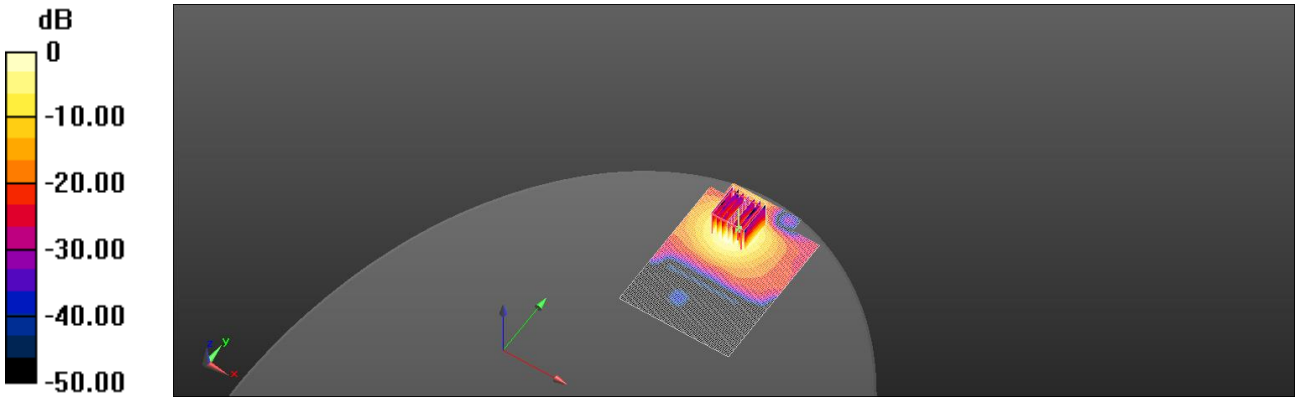
ID: 004
Report No. :TESA2507000556ES
WLAN 802.11a 5.6G_Body_Back Surface_CH 140_5mm _TE_2344655 (Monopole)
Communication System: WLAN; Frequency: 5700 MHz;Duty Cycle: 1:1.08
Medium parameters used: f = 5700 MHz; σ = 5.166 S/m; εr = 35.159; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.32, 5.56) @ 5700 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (81x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 2.98 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 12.78 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 5.36 W/kg
SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.362 W/kg
Smallest distance from peaks to all points 3 dB below = 8.6 mm
Ratio of SAR at M2 to SAR at M1 = 48%
Maximum value of SAR (measured) = 2.76 W/kg



0 dB = 2.76 W/kg = 4.41 dBW/kg

Date: 2025/7/28

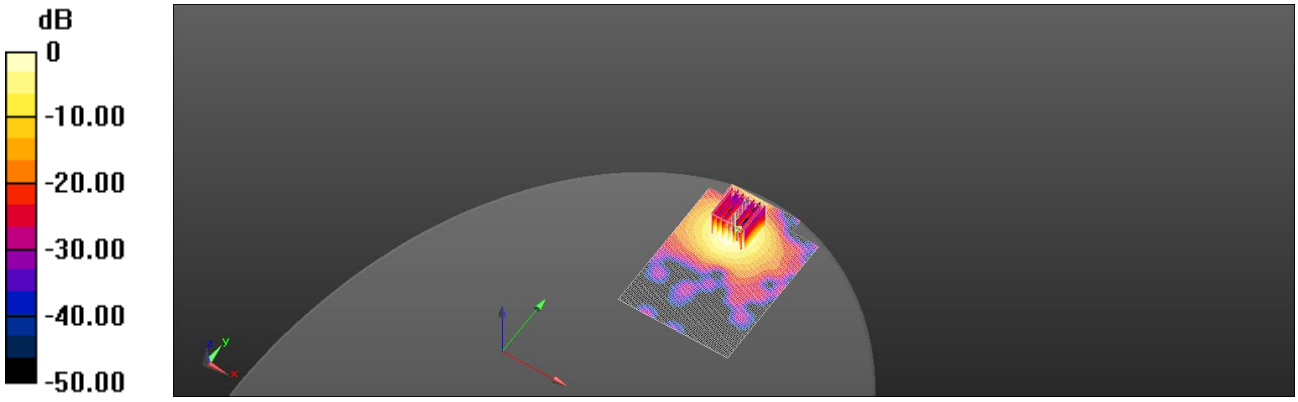
ID: 005
Report No. :TESA2507000556ES
WLAN 802.11a 5.8G_Body_Back Surface_CH 149_5mm _TE_2344655 (Monopole)
Communication System: WLAN; Frequency: 5745 MHz;Duty Cycle: 1:1.08
Medium parameters used: f = 5745 MHz; σ = 5.265 S/m; εr = 35.048; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.32, 5.56) @ 5745 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (81x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 2.70 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 12.19 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 4.82 W/kg
SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.326 W/kg
Smallest distance from peaks to all points 3 dB below = 8.5 mm
Ratio of SAR at M2 to SAR at M1 = 47.8%
Maximum value of SAR (measured) = 2.51 W/kg



0 dB = 2.51 W/kg = 3.99 dBW/kg

Date: 2025/7/28

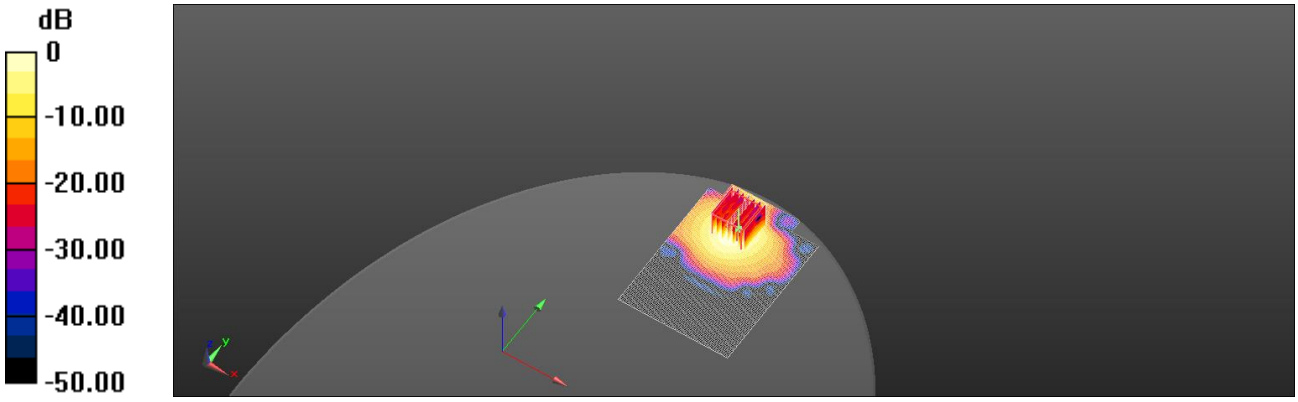
ID: 006
Report No. :TESA2507000556ES
WLAN 802.11a 5.9G_Body_Back Surface_CH 177_5mm _TE_2344655 (Monopole)
Communication System: WLAN; Frequency: 5885 MHz;Duty Cycle: 1:1.08
Medium parameters used: f = 5885 MHz; σ = 5.417 S/m; εr = 34.517; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.76, 5.28, 5.51) @ 5885 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (81x121x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 2.19 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 11.09 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 3.98 W/kg
SAR(1 g) = 0.834 W/kg; SAR(10 g) = 0.272 W/kg
Smallest distance from peaks to all points 3 dB below = 8.9 mm
Ratio of SAR at M2 to SAR at M1 = 46.5%
Maximum value of SAR (measured) = 2.00 W/kg



0 dB = 2.00 W/kg = 3.01 dBW/kg

Date: 2025/7/26

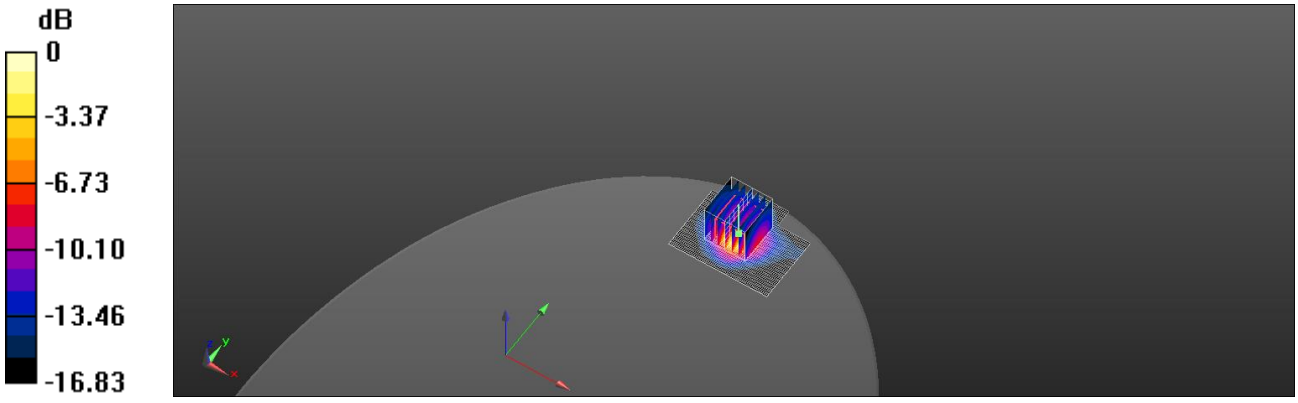
ID: 007
Report No. :TESA2507000556ES
WLAN 802.11ax(20M)_Body_Back Surface_CH 11_5mm_Antenova_SRF2W012
Communication System: WLAN; Frequency: 2462 MHz;Duty Cycle: 1:1.03
Medium parameters used: f = 2462 MHz; σ = 1.858 S/m; εr = 39.526; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.6°C; Liquid temperature: 22.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(7.73, 7.08, 7.39) @ 2462 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x71x1): Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 1.84 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.18 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.72 W/kg
SAR(1 g) = 0.858 W/kg; SAR(10 g) = 0.377 W/kg
Smallest distance from peaks to all points 3 dB below = 8 mm
Ratio of SAR at M2 to SAR at M1 = 52.7%
Maximum value of SAR (measured) = 1.44 W/kg



0 dB = 1.44 W/kg = 1.57 dBW/kg

Date: 2025/7/27

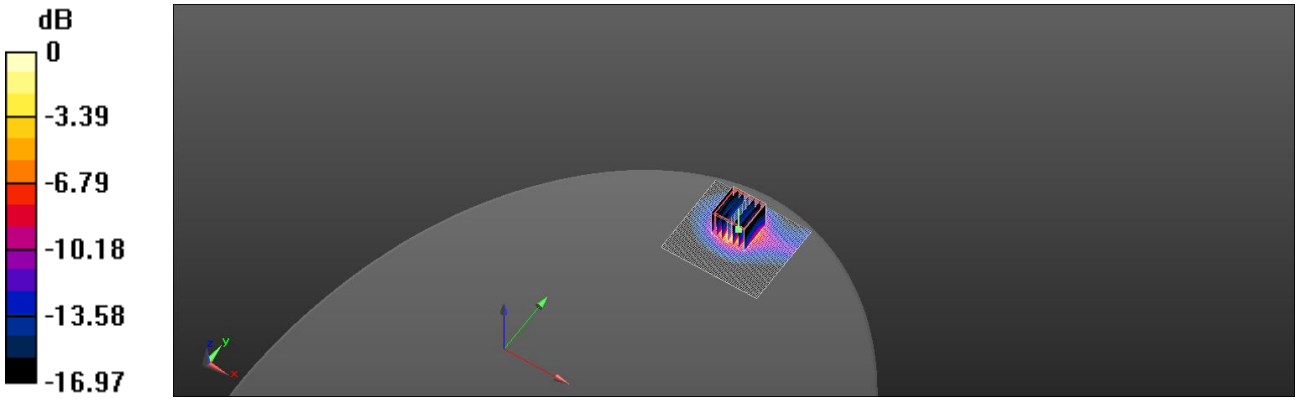
ID: 008
Report No. :TESA2507000556ES
WLAN 802.11a 5.2G_Body_Back Surface_CH 36_5mm _Antenova_SRF2W012
Communication System: WLAN; Frequency: 5180 MHz;Duty Cycle: 1:1.08
Medium parameters used: f = 5180 MHz; σ = 4.619 S/m; εr = 35.819; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.7°C; Liquid temperature: 22.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(6.25, 5.72, 5.98) @ 5180 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x81x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 2.75 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 11.55 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 4.04 W/kg
SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.377 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 58.2%
Maximum value of SAR (measured) = 2.61 W/kg



0 dB = 2.61 W/kg = 4.17 dBW/kg

Date: 2025/7/27

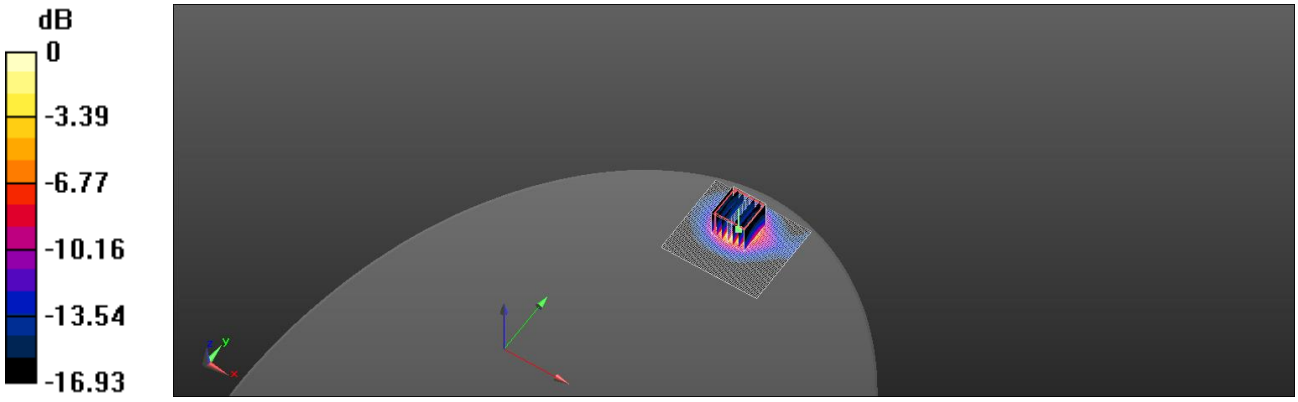
ID: 009
Report No. :TESA2507000556ES
WLAN 802.11a 5.3G_Body_Back Surface_CH 64_5mm _Antenova_SRF2W012
Communication System: WLAN; Frequency: 5320 MHz;Duty Cycle: 1:1.08
Medium parameters used: f = 5320 MHz; σ = 4.835 S/m; εr = 35.445; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.7°C; Liquid temperature: 22.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(6.25, 5.72, 5.98) @ 5320 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x81x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 2.42 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 6.451 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 3.70 W/kg
SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.342 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 57%
Maximum value of SAR (measured) = 2.34 W/kg



0 dB = 2.34 W/kg = 3.69 dBW/kg

Date: 2025/7/28

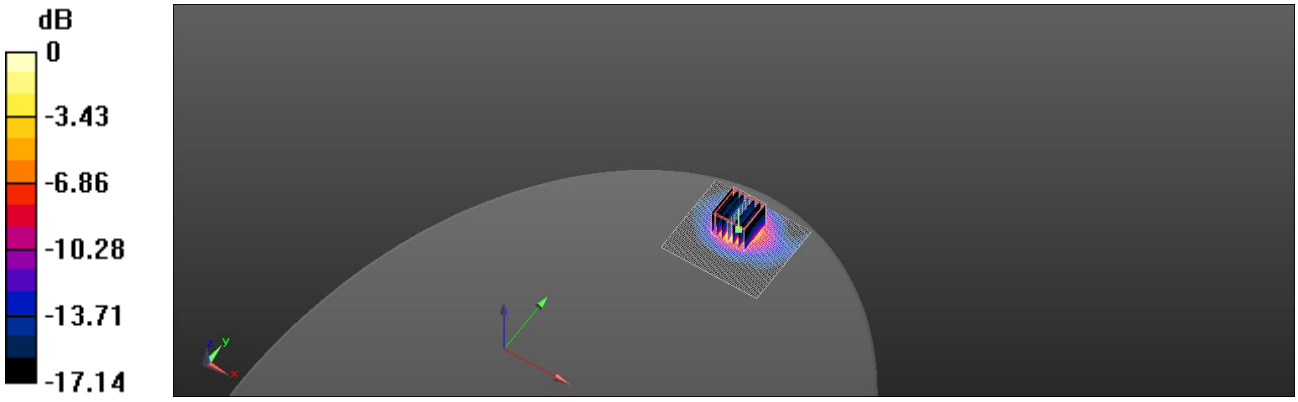
ID: 010
Report No. :TESA2507000556ES
WLAN 802.11a 5.6G_Body_Back Surface_CH 140_5mm _Antenova_SRF2W012
Communication System: WLAN; Frequency: 5700 MHz;Duty Cycle: 1:1.08
Medium parameters used: f = 5700 MHz; σ = 5.166 S/m; εr = 35.159; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.32, 5.56) @ 5700 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x81x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 3.02 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 6.434 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 4.98 W/kg
SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.353 W/kg
Smallest distance from peaks to all points 3 dB below = 6.8 mm
Ratio of SAR at M2 to SAR at M1 = 53.3%
Maximum value of SAR (measured) = 2.90 W/kg



0 dB = 2.90 W/kg = 4.62 dBW/kg

Date: 2025/7/28

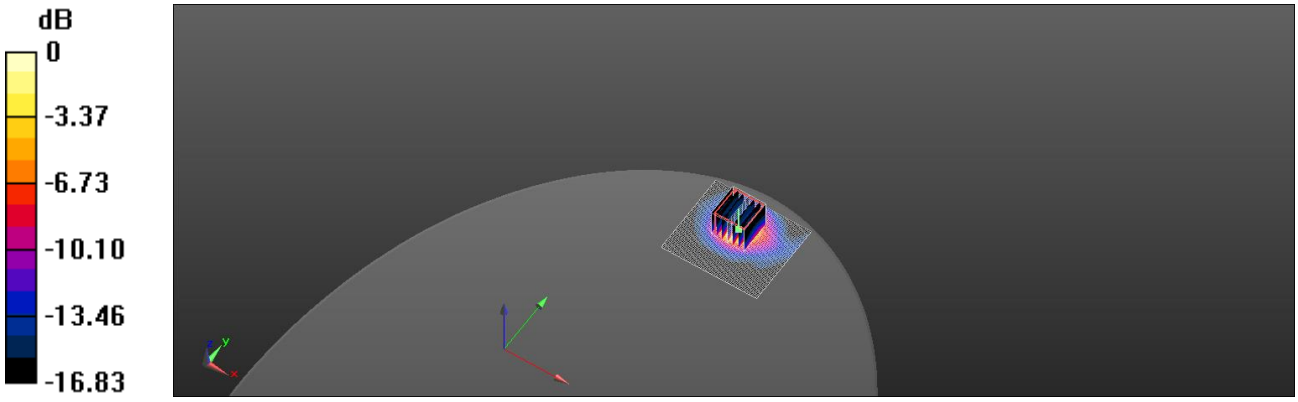
ID: 011
Report No. :TESA2507000556ES
WLAN 802.11a 5.8G_Body_Back Surface_CH 149_5mm _Antenova_SRF2W012
Communication System: WLAN; Frequency: 5745 MHz;Duty Cycle: 1:1.08
Medium parameters used: f = 5745 MHz; σ = 5.265 S/m; εr = 35.048; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.32, 5.56) @ 5745 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x81x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 2.89 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 6.442 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 4.77 W/kg
SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.364 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 53.2%
Maximum value of SAR (measured) = 2.78 W/kg



0 dB = 2.78 W/kg = 4.43 dBW/kg

Date: 2025/7/28

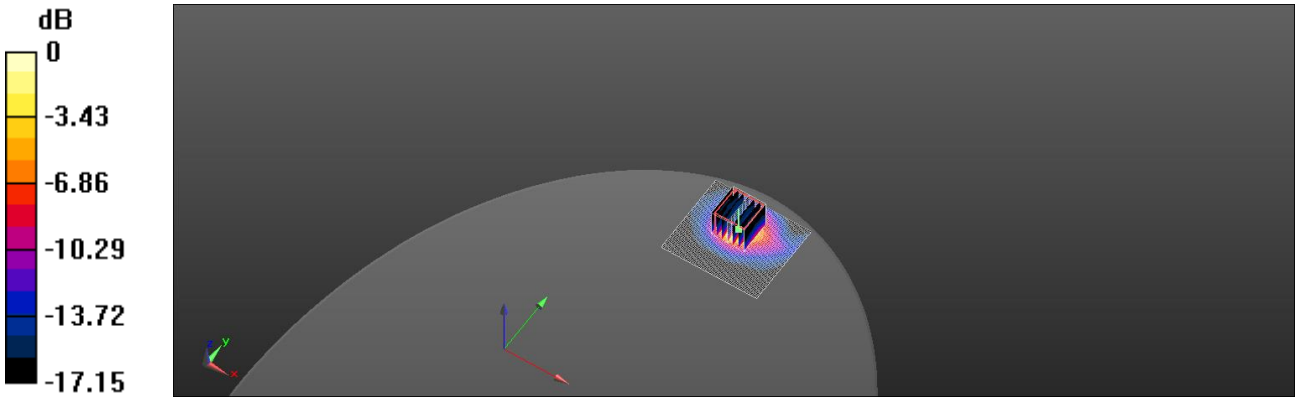
ID: 012
Report No. :TESA2507000556ES
WLAN 802.11a 5.9G_Body_Back Surface_CH 173_5mm _Antenova_SRF2W012
Communication System: WLAN; Frequency: 5865 MHz;Duty Cycle: 1:1.08
Medium parameters used: f = 5865 MHz; σ = 5.361 S/m; εr = 34.734; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.76, 5.28, 5.51) @ 5865 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x81x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 3.05 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 6.632 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 5.45 W/kg
SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.334 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 51.5%
Maximum value of SAR (measured) = 3.03 W/kg



0 dB = 3.03 W/kg = 4.81 dBW/kg

11 SAR SYSTEM CHECK RESULTS

Date: 2025/7/26

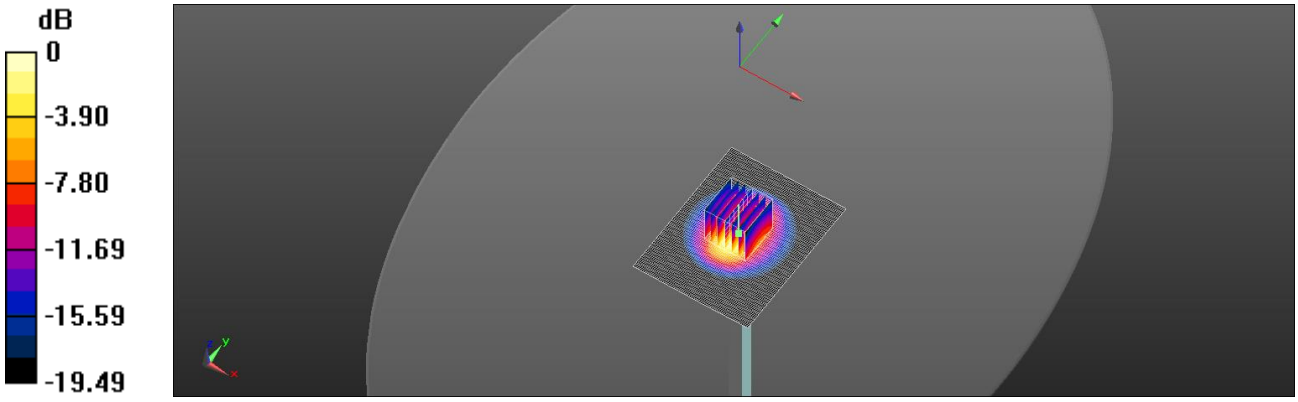
Report No. :TESA2507000556ES
Dipole 2450 MHz_SN:727
Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.845 S/m; εr = 39.562; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.6°C; Liquid temperature: 22.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(7.73, 7.08, 7.39) @ 2450 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x91x1): Interpolated grid: dx=12 mm, dy=12 mm
Maximum value of SAR (interpolated) = 17.5 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 99.05 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 21.6 W/kg
SAR(1 g) = 12.1 W/kg; SAR(10 g) = 5.99 W/kg
Smallest distance from peaks to all points 3 dB below = 9.8 mm
Ratio of SAR at M2 to SAR at M1 = 54.9%
Maximum value of SAR (measured) = 17.2 W/kg



0 dB = 17.2 W/kg = 12.36 dBW/kg

Date: 2025/7/27

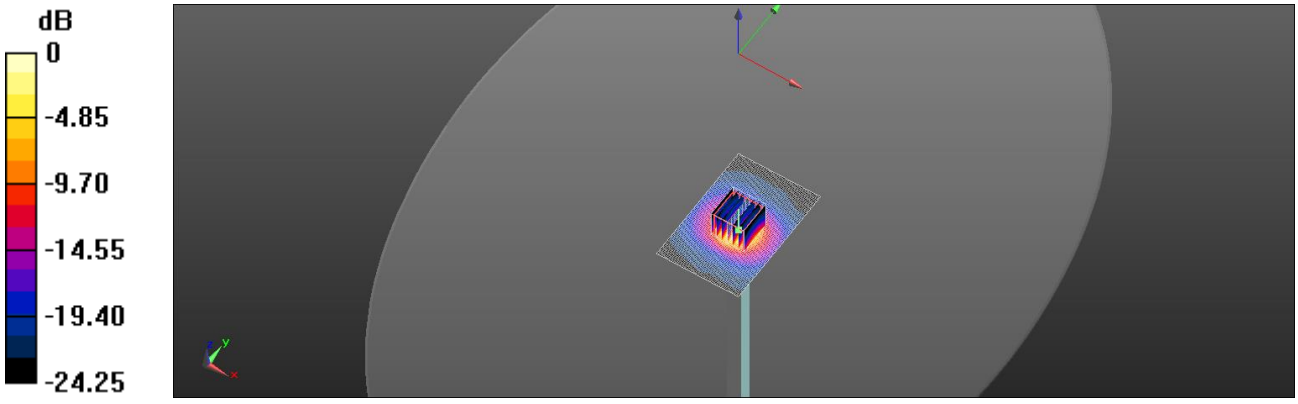
Report No. :TESA2507000556ES
Dipole 5250 MHz_SN:1349
Communication System: CW; Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.736 S/m; εr = 35.597; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.7°C; Liquid temperature: 22.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(6.25, 5.72, 5.98) @ 5250 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x91x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 16.2 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 56.01 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 31.4 W/kg
SAR(1 g) = 7.74 W/kg; SAR(10 g) = 2.25 W/kg
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 55.5%
Maximum value of SAR (measured) = 16.0 W/kg



0 dB = 16.0 W/kg = 12.05 dBW/kg

Date: 2025/7/27

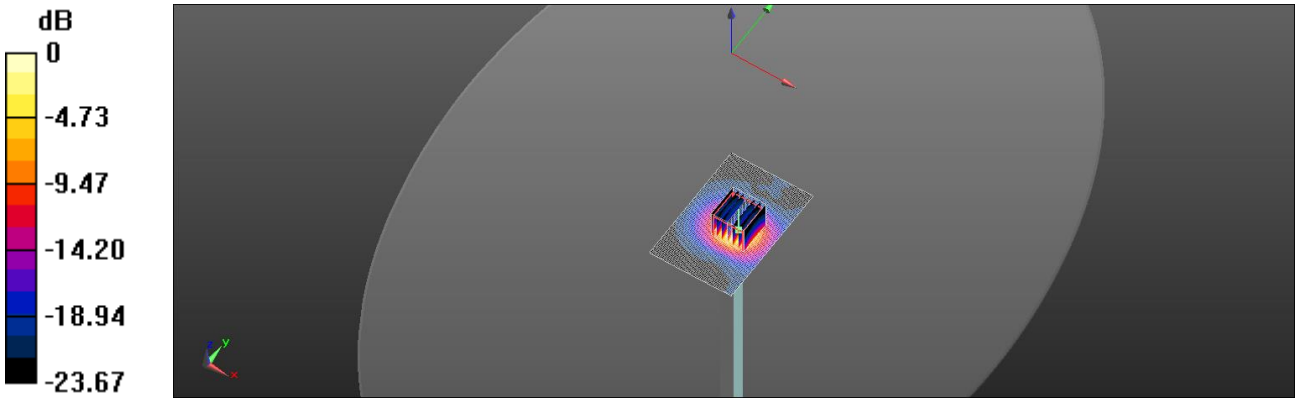
Report No. :TESA2507000556ES
Dipole 5600 MHz_SN:1349
Communication System: CW; Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 5.101 S/m; εr = 35.212; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.7°C; Liquid temperature: 22.5°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.68, 5.2, 5.44) @ 5600 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x91x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 19.1 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 48.81 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 37.3 W/kg
SAR(1 g) = 8.52 W/kg; SAR(10 g) = 2.46 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 52.8%
Maximum value of SAR (measured) = 17.8 W/kg



0 dB = 17.8 W/kg = 12.50 dBW/kg

Date: 2025/7/28

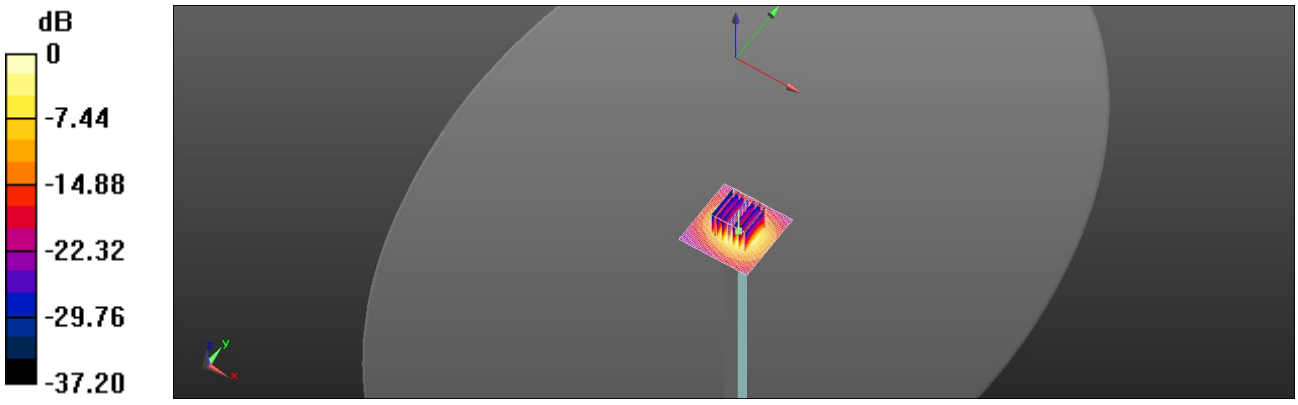
Report No. :TESA2507000556ES
Dipole 5750 MHz_SN:1349
Communication System: CW; Frequency: 5750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5750 MHz; σ = 5.275 S/m; εr = 34.968; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.81, 5.32, 5.56) @ 5750 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (51x51x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 20.6 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 53.24 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 37.6 W/kg
SAR(1 g) = 8.56 W/kg; SAR(10 g) = 2.46 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 52.8%
Maximum value of SAR (measured) = 17.4 W/kg



0 dB = 17.4 W/kg = 12.41 dBW/kg

Date: 2025/7/28

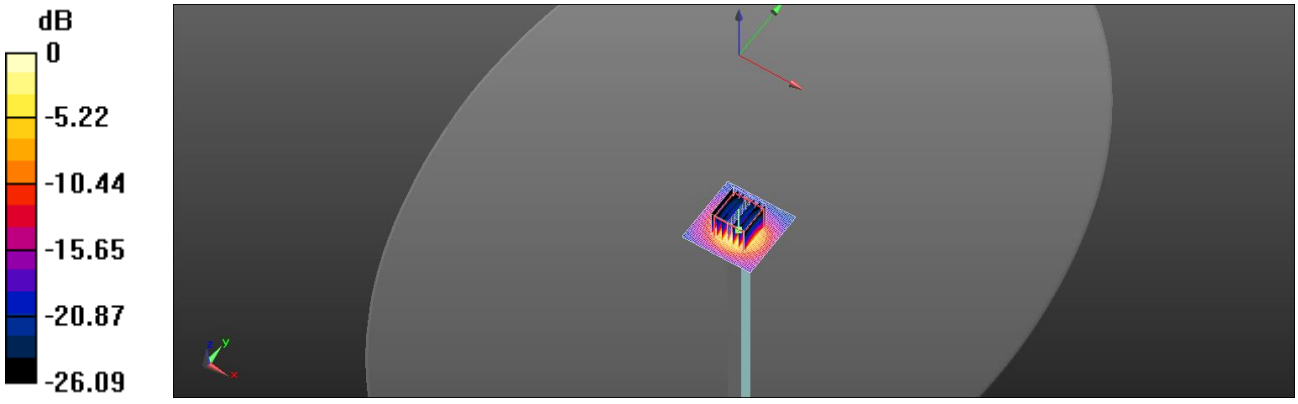
Report No. :TESA2507000556ES
Dipole 5850 MHz_SN:1349
Communication System: CW; Frequency: 5850 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5850 MHz; σ = 5.325 S/m; εr = 34.768; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7686; ConvF(5.76, 5.28, 5.51) @ 5850 MHz; Calibrated: 2024/10/07
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1719; Calibrated: 2025/01/20
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (51x51x1): Interpolated grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 22.4 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 61.19 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 38.3 W/kg
SAR(1 g) = 7.97 W/kg; SAR(10 g) = 2.28 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 49.4%
Maximum value of SAR (measured) = 20.2 W/kg



0 dB = 20.2 W/kg = 13.04 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

12.4 SAR_Appendix D Dipole Extended Calibration Verification

- End of report -