

RF Exposure report



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

Product Name 5G Mobile Wi-Fi
Brand Name tp-link
Model No. M8550
Applicant TP-LINK CORPORATION PTE. LTD.
7 Temasek Boulevard #29-03 Suntec Tower One,
Singapore 038987
Standards IEEE/ANSI C95.1-1992, IEEE 1528-2013
FCC ID 2BH7FM8550
Date of EUT Receipt Aug. 26, 2024
Date of Test(s) Aug. 27, 2024 ~ Jun. 17, 2025
Date of Issue Jun. 24, 2025

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.

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Signed on behalf of SGS

Clerk / Cindy Chou	PM / Ruby Ou	Approved By / John Yeh
Cindy Chou	Ruby Ou	John Teh

Date: Jun. 24, 2025

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Revision History

Report Number	Revision	Description	Issue Date	Revised By	Remark
TESA2408000514ES	00	Initial creation of document	Sep. 05, 2024	Cindy Chou	
TESA2408000514ES	01	Modify comment	Apr. 23, 2025	Cindy Chou	*
TESA2408000514ES	02	Modify comment	May 20, 2025	Cindy Chou	*
TESA2408000514ES	03	Modify comment	May 22, 2025	Cindy Chou	*
TESA2408000514ES	04	Modify comment	Jun. 05, 2025	Cindy Chou	*
TESA2408000514ES	05	Modify comment	Jun. 19, 2025	Cindy Chou	*
TESA2408000514ES	06	Modify comment	Jun. 24, 2025	Cindy Chou	*

Note:

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

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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

KDB941225D06v02r01

KDB248227D01v02r02

IEC/IEEE 62209-1528:2020

SPEAG DASY6 System Handbook

SPEAG DASY6 Application Note (Interim Procedure for Device Operation at 6GHz-10GHz)

IEC TR 63170:2018

IEC 62479:2010

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1.2 Description of EUT

Product Name	5G Mobile Wi-Fi	
Brand Name	tp-link	
Model No.	M8550	
FCC ID	2BH7FM8550	
Duty Cycle	WLAN 802.11	1
Supported radios (TX Frequency Range, MHz)	802.11ax	6.2GHz (6105.0 – 6425.0 MHz) 6.5GHz (6425.0 – 6525.0 MHz) 6.7GHz (6525.0 – 6875.0 MHz) 7.0GHz (6875.0 – 7125.0 MHz)

1.3 Maximum value

Summary of Maximum Power Density Value	
Mode	Highest PD (W/m ²)
6G WLAN	8.39

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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		
		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	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.

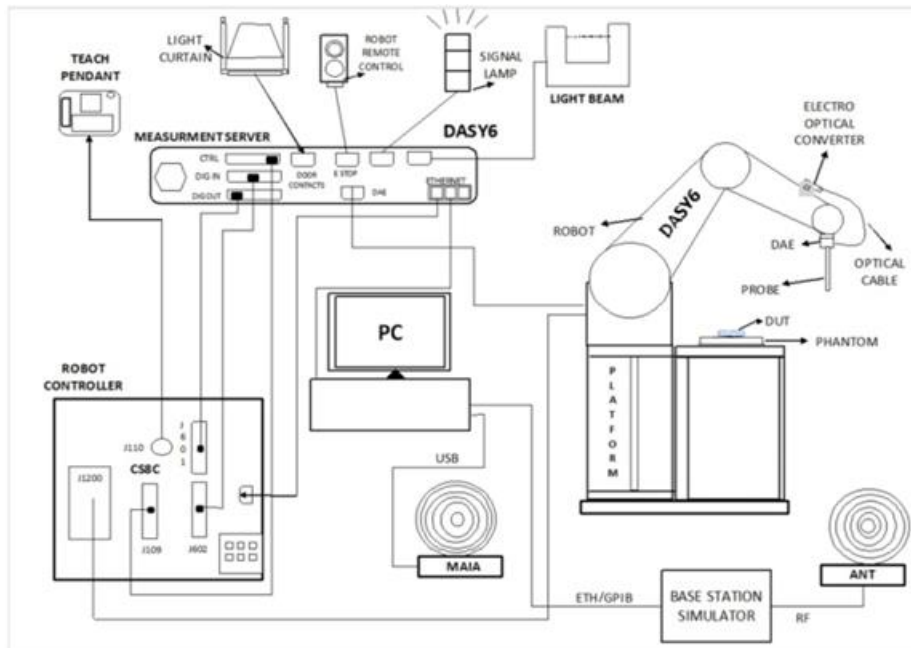
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2.2 PD system

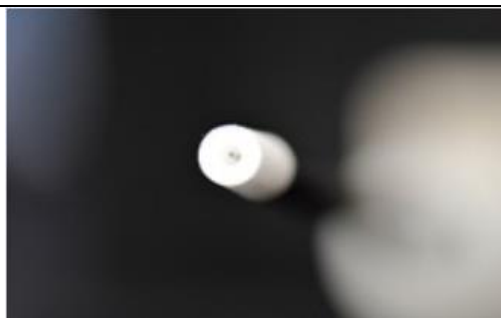
Block Diagram (DASY6)

Power density measurements for mmWave frequencies were performed using SPEAG DASY6 with cDASY6 5G module. The DASY6 included a high precision robotics system (Staubli), robot controller, desktop computer, near-field probe, probe alignment sensor, and the 5G phantom cover.



EUmmWVx probe

The EUmmWVx probe is based on the pseudo-vector probe design, which not only measures the field magnitude but also derives its polarization ellipse. The design entails two small 0.8mm dipole sensors mechanically protected by high-density foam, printed on both sides of a 0.9mm wide and 0.12mm thick glass substrate. The body of the probe is specifically constructed to minimize distortion by the scattered fields. The probe consist of two sensors with different angles (1 and 2) arranged in the same plane in the probe axis. Three or more measurements of the two sensors are taken for different probe rotational angles to derive the amplitude and polarization information. The probe design allows measurements at distances as small as 2mm from the sensors to the surface of the device under test (DUT). The typical sensor to probe tip distance is 1.5 mm. The exact distance is calibrated.



Two dipoles optimally arranged to obtain pseudo-vector information. Minimum 3 measurements/point, 120° rotated around probe axis.

Sensors (0.8mm length) printed on glass substrate protected by high density foam. Low perturbation of the measured field. Requires positioner which can do accurate probe rotation.

Frequency Range

750 MHz – 110 GHz

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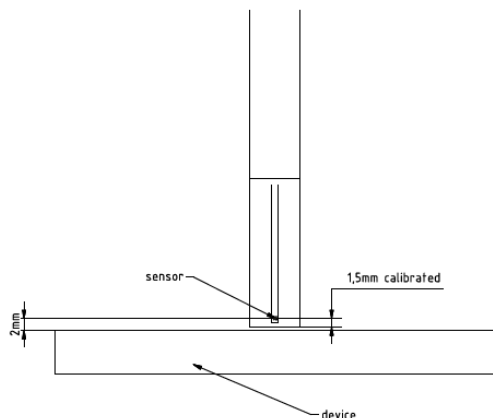
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Dynamic Range	< 20 V/m – 10,000 V/m with PRE-10 (min < 50 V/m - 3000 V/m)
Position Precision	< 0.2 mm (DASY6)
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: encapsulation 8 mm (internal sensor < 1mm) Distance from probe tip to dipole centers: < 2 mm. Sensor displacement to probe's calibration point: < 0.3 mm
Applications	E-field measurements of 5G devices and other mm-wave transmitters operating above 10GHz in < 2 mm distance from device (free-space). Power density, H-field and far-field analysis using total field reconstruction (cDASY6 5G module required)
Compatibility	cDASY6 + 5G-Module SW1.0 and higher



mmWave Phantom

The mmWave Phantom approximates free-space conditions, allowing for the evaluation of the antenna side of the device and the front (screen) side or any opposite-radiating side of wireless devices operating above 10 GHz without distorting the RF field. It consists of a 40mm thick Rohacell plate used as a test bed, which has a loss tangent ($\tan \delta$) ≤ 0.05 and a relative permittivity (ϵ_r) ≤ 1.2 . High-performance RF absorbers are placed below the foam.

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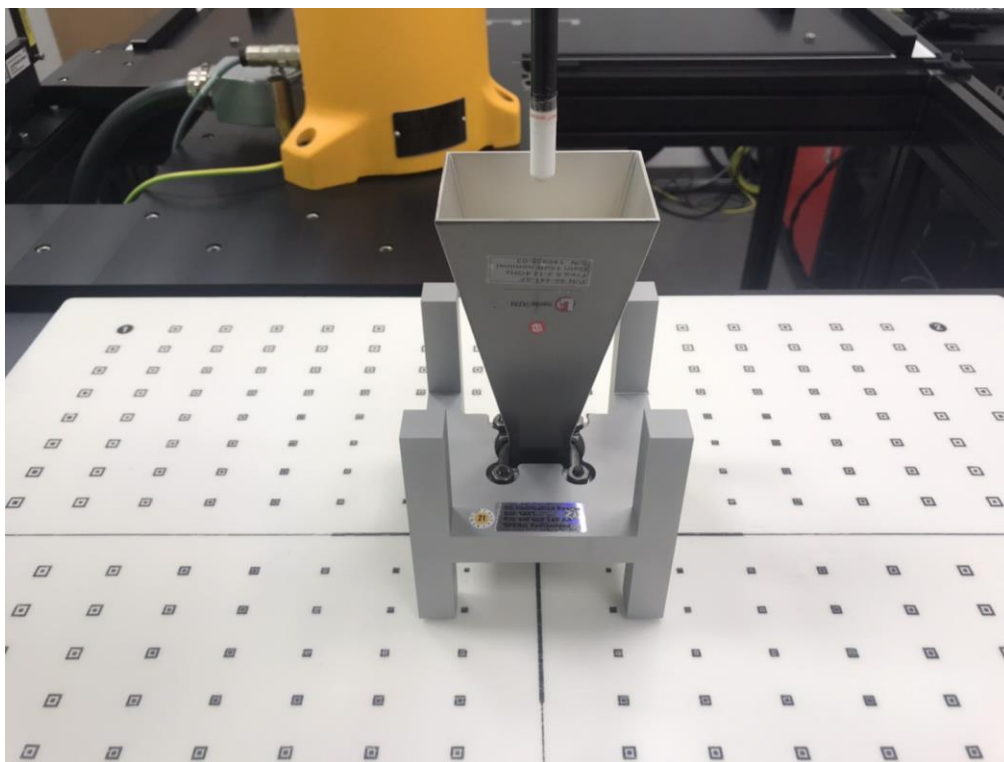
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3 PD SYSTEM VERIFICATION

3.1 System check

The system was verified to be within ± 0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check.

The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.



System Verification Setup Photo

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3.2 System check result

The system was verified to be within ± 0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check. The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.

Frequency (MHz)	PD Verification Source (MHz)	Probe S/N	DAE S/N	Distance (mm)	Prad (mW)	Measured 4cm ² (W/m ²)	Target 4cm ² (W/m ²)	Deviation (dB)	Date
10000	10000	9635	1719	10	93.3	48.5	56.2	-0.64	Jun.16,2025

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4 TEST CONFIGURATIONS

4.1 Test Environment

Ambient Temperature: $22 \pm 2^\circ \text{C}$

Tissue Simulating Liquid: $22 \pm 2^\circ \text{C}$

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.
- **WLAN 6GHz:** Per October 2020 & April 2021 TCB Workshop Interim procedures and FCC guidance, start instead with a minimum of 5 test channels across the full band, then adapt and apply conducted power and SAR test reduction procedures of KDB Pub. 248227 v02r02. WIFI 6E SAR is measured by using 6-7GHz parameters per IEC/IEEE62209- 1528:2020 and report also estimated absorbed PD (for reference purposes only, not specifically for compliance). For the highest SAR test configurations also measure incident PD (total) using mmW near-field probe and total-field/power-density reconstruction method.
- **WLAN 6GHz:** According to October 2020 TCB Workshop Interim procedures, power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty > 30%. Total expanded uncertainty of 2.67 dB (85%) was used to determine the psPD measurement scaling factor.

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4.3 Test position

Bottom surface_2mm

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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

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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

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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)

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5 MAXIMUM OUTPUT POWER

5.1 WIFI 6E MIMO

Mode	Channel	Frequency (MHz)	Average Power (dBm)	Tune-up (dBm)
802.11ax (HE20)	33	6115	2.34	3
	97	6435	1.98	3
	117	6535	2.31	3
	189	6895	1.33	2.5
	229	7095	1.90	3
802.11ax (HE40)	35	6125	5.56	6
	99	6445	5.25	6
	147	6685	5.62	6
	195	6925	4.02	5.5
	227	7085	5.07	6
802.11ax (HE80)	39	6145	8.15	9
	103	6465	8.27	9
	151	6705	8.32	9
	199	6945	7.76	9
	215	7025	7.98	9
802.11ax (HE160)	47	6185	9.76	10
	79	6345	9.50	10
	111	6505	9.37	10
	143	6665	9.60	10
	207	6985	9.17	10

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6 SUMMARY OF RESULTS

6.1 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.

6.2 Summary of PD Results

Band	Antenna	Position	Distance (mm)	Channel	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Tune-up Scaling	Duty cycle scaling	Measurement uncertainty	PD result(4cm)				ID
											Measured Total psPD (W/m ²)	Reported Total psPD (W/m ²)	Measured Normal psPD (W/m ²)	Reported Normal psPD (W/m ²)	
U-NII-5 6.2GHz 802.11ax(160M)	MIMO	Bottom Surface	2	47	6185	10.00	9.76	105.68%	1.007	1.55	4.670	7.703	4.360	7.192	001
	MIMO	Bottom Surface	2	79	6345	10.00	9.50	112.20%	1.007	1.55	4.790	8.388	4.200	7.355	002
U-NII-6 6.5GHz 802.11ax(160M)	MIMO	Bottom Surface	2	111	6505	10.00	9.37	115.49%	1.007	1.55	4.410	7.949	3.580	6.453	003
U-NII-7 6.7GHz 802.11ax(160M)	MIMO	Bottom Surface	2	143	6665	10.00	9.60	109.65%	1.007	1.55	3.970	6.794	3.070	5.254	004
U-NII-8 7.0GHz 802.11ax(160M)	MIMO	Bottom Surface	2	207	6985	10.00	9.17	121.19%	1.007	1.55	1.890	3.575	1.620	3.064	005

Note:

Reported PD = measured PD * Power scaling * Duty cycle scaling * Uncertainty scaling

6.3 Reporting statements of conformity

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

6.4 Conclusion

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

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7 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	E-field Probe for Near Field Application	EUmmWV4	9635	Apr/22/2025	Apr/21/2026
SPEAG	5G Verification Source 10GHz	5G-Veri10	1070	Aug/16/2024	Aug/15/2025
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
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 6 mmWave V2.4.2.62	N/A	Calibration not required	Calibration not required
SPEAG	Phantom	mmWave Phantom	N/A	Calibration not required	Calibration not required
TECEP	Digital thermometer	DTM-303A	TP130077	Oct/14/2024	Oct/13/2025

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8 UNCERTAINTY BUDGET

DASY6 Uncertainty Budget According to IEC/IEEE 62209-1528 (Frequency band: 6GHz - 10GHz range)

a	b	c	d		e	e	f=b * e / d	f=b * e / d
Source of Uncertainty	Uncertainty Value (±%)	Probability Distribution	Div.	Div. Value	(ci) 1g	(ci) 10g	Std. uncertainty (1g) (±%)	Std. uncertainty (10g) (±%)
Measurement system errors								
Probe calibration	18.6	N	2	2	1	1	9.3	9.3
Probe Calibration Drift	1.7	R	√3	1.732	1	1	1.0	1.0
Probe Linearity	4.7	R	√3	1.732	1	1	2.7	2.7
Broadband Signal	2.8	R	√3	1.732	1	1	1.6	1.6
Probe Isotropy	7.6	R	√3	1.732	1	1	4.4	4.4
Data Acquisition	0.3	N	1	1	1	1	0.3	0.3
RF Ambient	1.8	N	1	1	1	1	1.8	1.8
Probe positioning	0.2	N	1	1	0.67	0.67	0.1	0.1
Data Processing	3.5	N	1	1	1	1	3.5	3.5
Phantom and device errors								
Conductivity (meas.)DAK	2.5	N	1	1	0.78	0.71	2.0	1.8
Conductivity (temp.)BB	2.4	R	√3	1.732	0.78	0.71	1.1	1.0
Phantom Permittivity	14.0	R	√3	1.732	0.5	0.5	4.0	4.0
Distance DUT - TSL	2.0	N	1	1	2	2	4.0	4.0
Device Positioning (±0.5mm)	1.0	N	1	1	1	1	1.0	1.0
Device Holder	3.6	N	1	1	1	1	3.6	3.6
DUT Modulationm	2.4	R	√3	1.732	1	1	1.4	1.4
Time-average SAR	0.0	R	√3	1.732	1	1	0.0	0.0
DUT drift	2.5	N	1	1	1	1	2.5	2.5
Val Antenna Unc.	0.0	N	1	1	1	1	0.0	0.0
Unc. Input Power	0.0	N	1	1	1	1	0.0	0.0
Correction to the SAR results								
Deviation to Target	1.90	N	1	1	1	0.84	1.9	1.6
SAR scaling		R	√3	1.732	1	1	0.0	0.0
Combined Std. uncertainty							14.0	13.9
Expanded Std. uncertainty (95% confidence interval), K=2							28.0	27.8

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**cDASY6 Module mmWave Uncertainty Budget for PD
Evaluation Distances to the Antennas $\geq \lambda/5$
In Compliance with IEC/IEEE 63195**

a	b	c	d		e	f=b * e / d	g
Source of Uncertainty	Uncertainty Value (+/-dB)	Probability Distribution	Div.	Div. Value	ci	Std. uncertainty (+/-dB)	(vi) Veff
Uncertainty terms dependent on the measurement system							
Probe calibration	0.49	N	1	1	1	0.49	∞
Probe correction	0.00	R	$\sqrt{3}$	1.732	1	0.00	∞
Frequency response (BW \leq 1GHz)	0.20	R	$\sqrt{3}$	1.732	1	0.12	∞
Sensor cross coupling	0.00	R	$\sqrt{3}$	1.732	1	0.00	∞
Isotropy	0.50	R	$\sqrt{3}$	1.732	1	0.29	∞
Linearity	0.20	R	$\sqrt{3}$	1.732	1	0.12	∞
Probe scattering	0.00	R	$\sqrt{3}$	1.732	1	0.00	∞
Probe positioning offset	0.30	R	$\sqrt{3}$	1.732	1	0.17	∞
Probe positioning repeatability	0.04	R	$\sqrt{3}$	1.732	1	0.02	∞
Sensor mechanical offset	0.00	R	$\sqrt{3}$	1.732	1	0.00	∞
Probe spatial resolution	0.00	R	$\sqrt{3}$	1.732	1	0.00	∞
Field impedance dependence	0.00	R	$\sqrt{3}$	1.732	1	0.00	∞
Amplitude and phase drift	0.00	R	$\sqrt{3}$	1.732	1	0.00	∞
Amplitude and phase noise	0.04	R	$\sqrt{3}$	1.732	1	0.02	∞
Measurement area truncation	0.00	R	$\sqrt{3}$	1.732	1	0.00	∞
Data acquisition	0.03	N	1	1	1	0.03	∞
Sampling	0.00	R	$\sqrt{3}$	1	1	0.00	∞
Field reconstruction	2.00	R	$\sqrt{3}$	1.732	1	1.15	∞
Forward transformation	0.00	R	$\sqrt{3}$	1.732	1	0.00	∞
Power density scaling	-	R	$\sqrt{3}$	1.732	1	-	∞
Spatial averaging	0.10	R	$\sqrt{3}$	1.732	1	0.06	∞
System detection limit	0.04	R	$\sqrt{3}$	1.732	1	0.02	∞
Uncertainty terms dependent on the DUT and environmental factors							
Probe coupling with DUT	0.00	R	$\sqrt{3}$	1.732	1	0.00	∞
Modulation response	0.40	R	$\sqrt{3}$	1.732	1	0.23	∞
Integration time	0.00	R	$\sqrt{3}$	1.732	1	0.00	∞
Response time	0.00	R	$\sqrt{3}$	1.732	1	0.00	∞
Device holder influence	0.10	R	$\sqrt{3}$	1.732	1	0.06	∞
DUT alignment	0.00	R	$\sqrt{3}$	1.732	1	0.00	∞
RF ambient conditions	0.04	R	$\sqrt{3}$	1.732	1	0.02	∞
Ambient reflections	0.04	R	$\sqrt{3}$	1.732	1	0.02	∞
Immunity / secondary reception	0.00	R	$\sqrt{3}$	1.732	1	0.00	∞
Drift of the DUT	-	R	$\sqrt{3}$	1.732	1	-	∞
Combined Std. uncertainty						1.33	
Expanded Std. uncertainty (95% confidence interval), K=2						2.67	

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9 PD MEASUREMENT RESULTS

ID: 001

Report No. :TESA2408000514ES

Measurement Report_Bottom Surface, U-NII-5

IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), Channel 47 (6185.0 MHz)_2mm_MIMO

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Conversion Factor
5G	Bottom Surface, 2.00	1.0

Hardware Setup

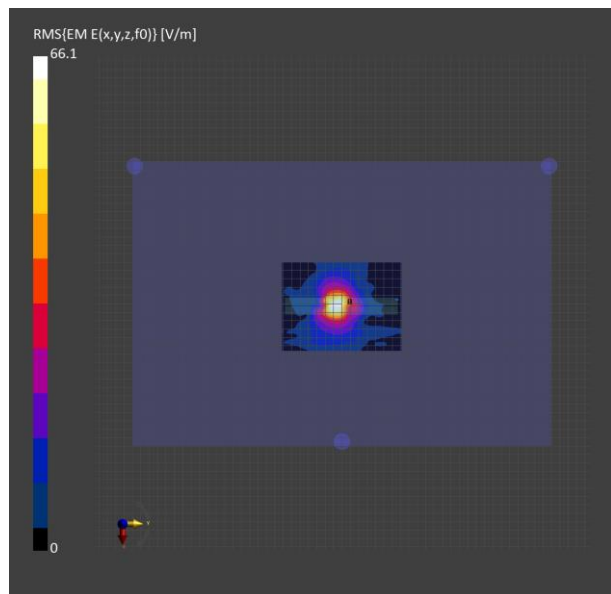
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9635_F1-55GHz, 2025-04-22	DAE4 Sn1719, 2025-01-20

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 140.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0

Measurement Results

Scan Type	5G Scan
Date	2025-06-16
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	4.36
psPDtot+ [W/m ²]	4.67
psPDmod+ [W/m ²]	6.23
E _{max} [V/m]	66.1
Power Drift [dB]	0.08



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ID: 002

Report No. :TESA2408000514ES

Measurement Report_Bottom Surface, U-NII-5

IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), Channel 79 (6345.0 MHz)_2mm_MIMO

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Conversion Factor
5G	Bottom Surface, 2.00	1.0

Hardware Setup

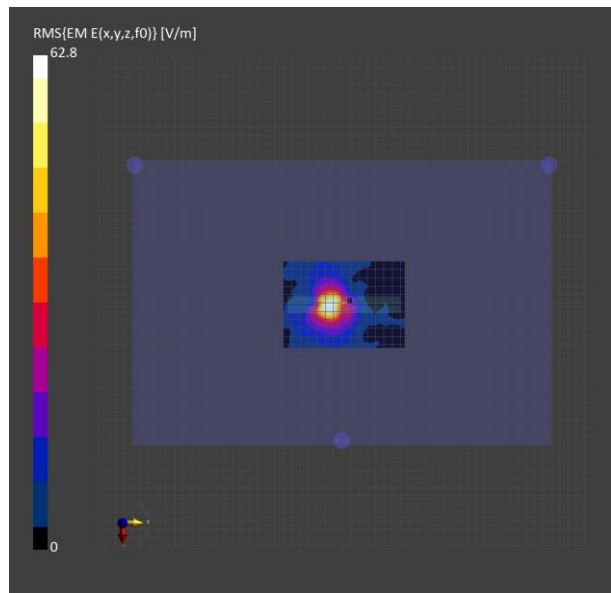
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9635_F1-55GHz, 2025-04-22	DAE4 Sn1719, 2025-01-20

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 140.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0

Measurement Results

Scan Type	5G Scan
Date	2025-06-16
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	4.20
psPDtot+ [W/m ²]	4.79
psPDmod+ [W/m ²]	5.92
E _{max} [V/m]	62.8
Power Drift [dB]	0.14



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ID: 003

Report No. :TESA2408000514ES

Measurement Report_Bottom Surface, U-NII-6

IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), Channel 111 (6505.0 MHz)_2mm_MIMO

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Conversion Factor
5G	Bottom Surface, 2.00	1.0

Hardware Setup

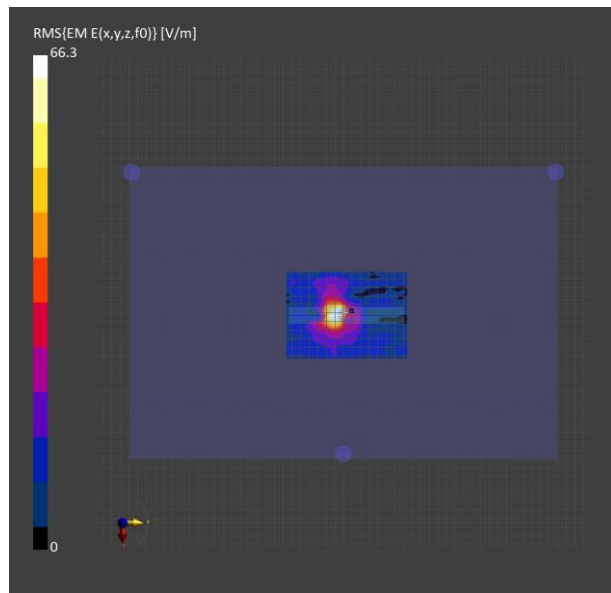
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9635_F1-55GHz, 2025-04-22	DAE4 Sn1719, 2025-01-20

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 140.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0

Measurement Results

Scan Type	5G Scan
Date	2025-06-16
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	3.58
psPDtot+ [W/m ²]	4.41
psPDmod+ [W/m ²]	6.34
E _{max} [V/m]	66.3
Power Drift [dB]	0.15



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ID: 004

Report No. :TESA2408000514ES

Measurement Report_Bottom Surface, U-NII-7

IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), Channel 143 (6665.0 MHz)_2mm_MIMO

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Conversion Factor
5G	Bottom Surface, 2.00	1.0

Hardware Setup

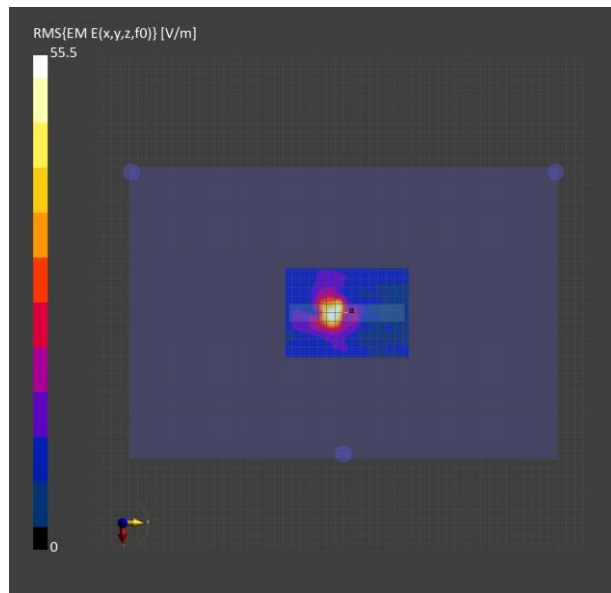
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9635_F1-55GHz, 2025-04-22	DAE4 Sn1719, 2025-01-20

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 140.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0

Measurement Results

Scan Type	5G Scan
Date	2025-06-16
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	3.07
psPDtot+ [W/m ²]	3.97
psPDmod+ [W/m ²]	5.10
E _{max} [V/m]	55.5
Power Drift [dB]	-0.18



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ID: 005

Report No. :TESA2408000514ES

Measurement Report_Bottom Surface, U-NII-8

IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle), Channel 207 (6985.0 MHz)_2mm_MIMO

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Conversion Factor
5G	Bottom Surface, 2.00	1.0

Hardware Setup

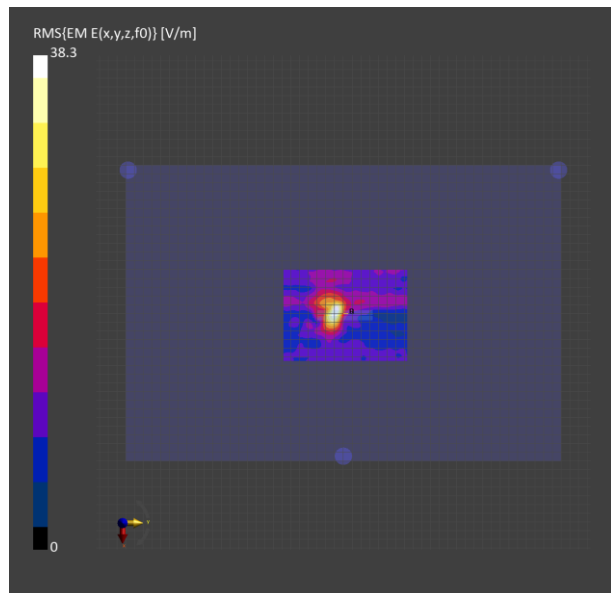
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9635_F1-55GHz, 2025-04-22	DAE4 Sn1719, 2025-01-20

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 140.0
Grid Steps [lambda]	0.0625 x 0.0625
Sensor Surface [mm]	2.0

Measurement Results

Scan Type	5G Scan
Date	2025-06-16
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	1.62
psPDtot+ [W/m ²]	1.89
psPDmod+ [W/m ²]	2.52
E _{max} [V/m]	38.3
Power Drift [dB]	-0.19



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10 PD SYSTEM CHECK RESULTS

Report No. :TESA2408000514ES

Measurement Report

5G Verification Source 10GHz-SN:1070

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Conversion Factor
5G	FRONT, 10.00	1.0

Hardware Setup

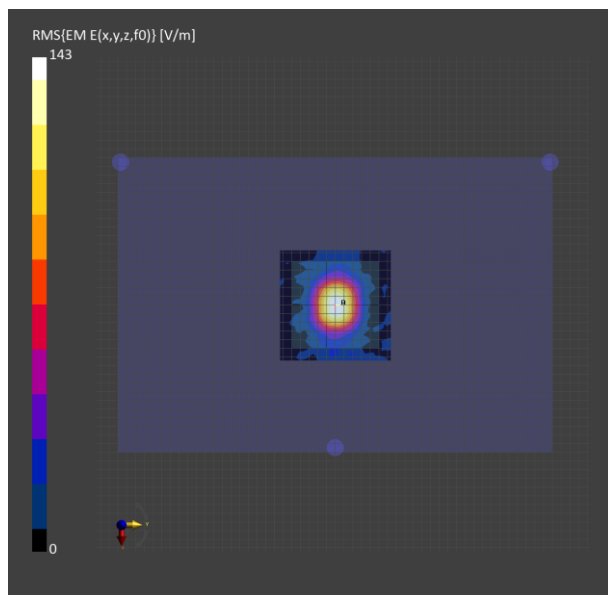
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air -	EUmmWV4 - SN9635_F1-55GHz, 2025-04-22	DAE4 Sn1719, 2025-01-20

Scans Setup

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

Measurement Results

Scan Type	5G Scan
Date	2025-06-16
Avg. Area [cm ²]	1.00
psPDn+ [W/m ²]	48.3
psPDtot+ [W/m ²]	48.5
psPDmod+ [W/m ²]	48.6
E _{max} [V/m]	142
Power Drift [dB]	-0.02



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11 APPENDIXES

Refer to separated files for the following appendixes.

11.1 SAR_Appendix A Photographs

11.2 SAR_Appendix B DAE & Probe Cal. Certificate

11.3 SAR_Appendix C Phantom Description & Dipole Cal. Certificate

- End of report -

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