



## SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

Report No.: SUCR250600052501

Rev.: 01

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# Power Density Measurement Report

**Application No.:** SUCR2506000525IT  
**Applicant:** Lenovo (Shanghai) Electronics Technology Co., Ltd.  
**Address of Applicant:** Section 304-305, Building No. 4, # 222, Meiyue Road, China (Shanghai) Pilot Free Trade Zone  
**Manufacturer:** Lenovo PC HK Limited  
**Address of Manufacturer:** 23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong, China  
**Product Name:** Portable Tablet Computer  
**Model No.:** TB710FU  
**Trade Mark:** Lenovo  
**FCC ID:** O57TB710FU  
**Standards:** FCC 47CFR §2.1093  
IEC/IEEE 63195-1:2022  
IEC/IEEE 62209-1528:2020  
**Date of Receipt:** 2025/06/05  
**Date of Test:** 2025/07/07  
**Date of Issue:** 2025/07/22

<b>Test conclusion:</b>	<b>PASS *</b>
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\*In the configuration tested, the EUT detailed in this report complied with the standards specified above.

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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Revision Record			
Version	Description	Date	Remark
01	Original	2025/07/22	/

Authorized for issue by:		
Prepared By		 Leon Liu/ Project Manager
Approved By		 Nick Hu/ Technical Manager



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### TEST SUMMARY

Frequency Band	Reported PD (W/m <sup>2</sup> )
WIFI 6E	9.98
PD Limit	10.0



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### 1 General Information

#### 1.1 Details of Client

Applicant:	Lenovo (Shanghai) Electronics Technology Co., Ltd.
Address:	Section 304-305, Building No. 4, # 222, Meiyue Road, China (Shanghai) Pilot Free Trade Zone
Manufacturer:	Lenovo PC HK Limited
Address:	23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong, China

#### 1.2 Test Location

Company:	SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
Address:	No. 1 Workshop, M-10, Middle section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China
Post code:	518057
Test Engineer:	Bert Xu

#### 1.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• **A2LA (Certificate No. 6336.01)**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6336.01.

• **Innovation, Science and Economic Development Canada**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0120.

IC#: 27594.

• **FCC –Designation Number: CN1312**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized as an accredited testing laboratory.

Designation Number: CN1312.

Test Firm Registration Number: 0031225543



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### 1.4 General Description of EUT

Device Type :	portable device		
Exposure Category:	uncontrolled environment / general population		
Product Name:	Portable Tablet Computer		
Model No.(EUT):	TB710FU		
Trade Mark:	Lenovo		
Product Phase:	production unit		
Hardware Version:	TB710FU		
Software Version:	Lenovo ZUI 17.0		
SN:	1#: HA2AJ60W 2#: HA2AL6PH		
Modulation Mode:	OFDM, OFDMA		
Frequency Bands:	Band	Tx (MHz)	Rx (MHz)
	UNII-5	5925-6425	5925-6425
	UNII-6	6425-6525	6425-6525
	UNII-7	6525-6875	6525-6875
	UNII-8	6875-7125	6875-7125
Note:	Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, SGS is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.		
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### 1.5 Test Specification

Identity	Document Title
FCC 47CFR §2.1093	Radiofrequency Radiation Exposure Evaluation: Portable Devices
ANSI/IEEE C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.
IEC/IEEE 62209-1528:2020	Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)
IEC/IEEE 63195-1:2022	Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz) – Part 1: Measurement procedure
KDB 447498 D01	General RF Exposure Guidance v06
KDB 248227 D01	SAR Guidance for IEEE 802 11 Wi-Fi SAR v02r02

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### 1.6 RF exposure limit for above 6GHz

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 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 4cm<sup>2</sup> per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes.

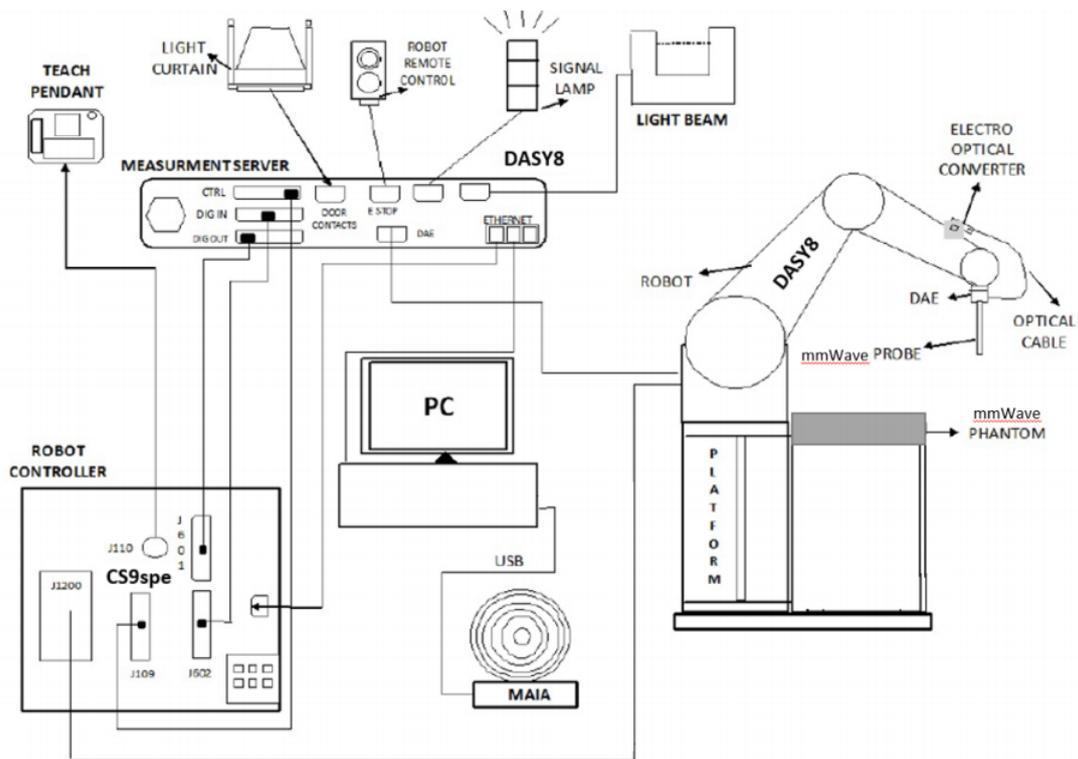
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposures</b>				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6
30-300	61.4	0.163	1.0	6
300-1500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

**Note:** 1.0 mW/cm<sup>2</sup> is equal to 10.0 W/m<sup>2</sup>

## 2 System Description and Setup

### 2.1 Power density measurement system

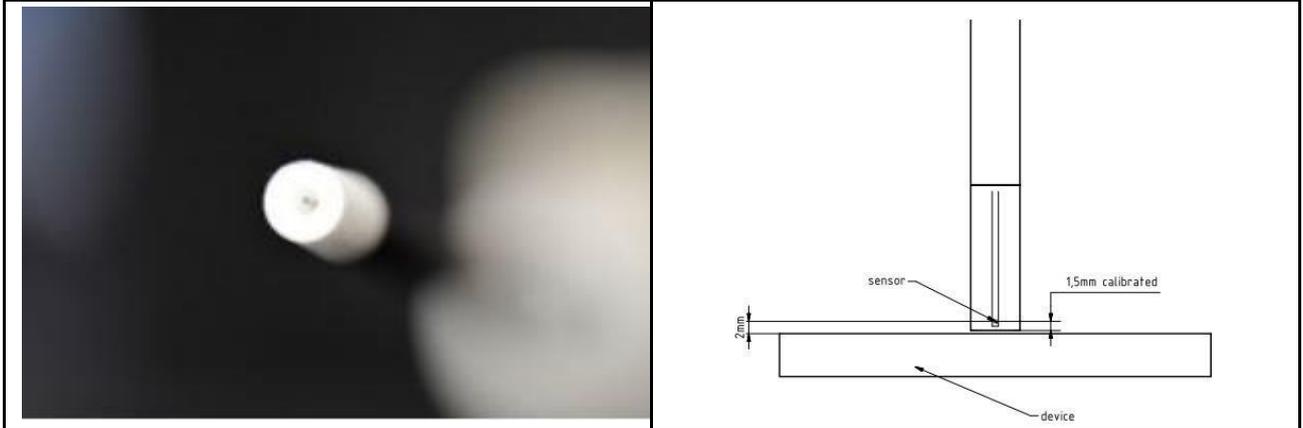
Power density measurements for mmWave frequencies were performed using SPEAG DASY8 with cDASY8 5G module. The DASY8 included a high precision robotics system (Staubli), robot controller, desktop computer, near-field probe, probe alignment sensor, and the 5G phantom cover.



Measurement System Configuration

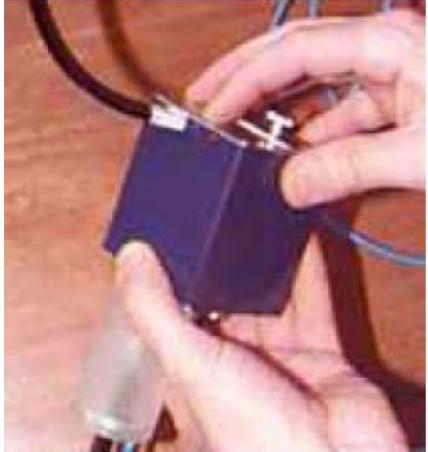
## 2.2 EUmmWaVe probe

Frequency	750 MHz – 110 GHz
Probe Overall Length	320 mm
Probe Body Diameter	8.0 mm
Tip Length	23.0 mm
Tip Diameter	8.0 mm
Probe's two dipoles length	0.9 mm – Diode loaded
Dynamic Range	< 20 V/m - 10000 V/m with PRE-10 (min < 50 V/m - 3000 V/m)
Position Precision	< 0.2 mm
Distance between diode sensors and probe's tip	1.5 mm
Minimum Mechanical separation between probe tip and a Surface	0.5 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.
Compatibility	cDASY8 + 5G-Module SW1.0 and higher



The EUmmWaVe 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 consists 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.

### 2.3 Data Acquisition Electronics (DAE)

<b>Model</b>	DAE	
<b>Construction</b>	Signal amplifier, multiplexer, A/D converter and control logic. Serial optical link for communication with DASY4/5 embedded system (fully remote controlled). Two step probe touch detector for mechanical surface detection and emergency robot stop.	
<b>Measurement Range</b>	-100 to +300 mV (16-bit resolution and two range settings: 4mV,400mV)	
<b>Input Offset Voltage</b>	< 5μV (with auto zero)	
<b>Input Bias Current</b>	< 50 f A	
<b>Dimensions</b>	60 x 60 x 68 mm	

### 2.4 Scan configuration

Fine-resolution scans on 2 different planes are performed to reconstruct the E- and H-fields as well as the power density; the z-distance between the 2 planes is set to  $\lambda/4$ . The (x, y) grid step is also set  $\lambda/4$ , the grid extent is set to sufficiently large to identify the field pattern and the peak.

### 3 System Verification Procedure

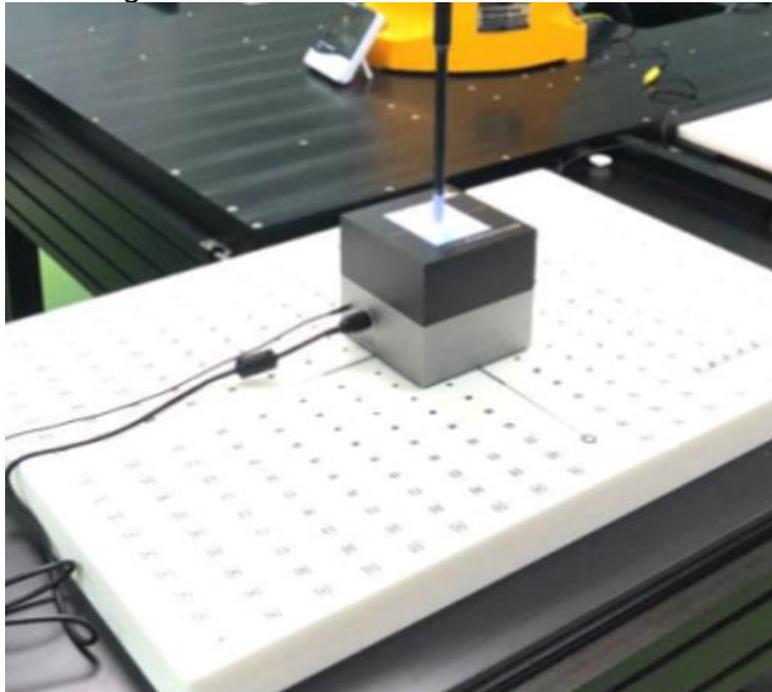
#### 3.1 PD Test System Verification

The system was verified to be within  $\pm 0.66$  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 [GHz]	Grid step	Grid extent X/Y [mm]	Measurement points
10	0.25 ( $\frac{\lambda}{4}$ )	120/120	16 × 16
30	0.25 ( $\frac{\lambda}{4}$ )	60/60	24 × 24
60	0.25 ( $\frac{\lambda}{4}$ )	32.5/32.5	26 × 26
90	0.25 ( $\frac{\lambda}{4}$ )	30/30	36 × 36

Settings for measurement of verification sources



System Verification Setup Photo



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### 3.2 PD System Verification Results

Frequent	Measured PD W/m <sup>2</sup>	Target PD W/m <sup>2</sup>	Circular Deviation (Within $\pm 0.66$ dB)	Test Date
	4cm <sup>2</sup>	4cm <sup>2</sup>	4cm <sup>2</sup>	
10GHz Source	185	183	0.05	2025/7/7

### 3.3 Detailed System Check Results

Please see the Appendix A

## 4 Measurement Data

1. The PD test was performed of a 2mm separation between sensor and EUT surface (the probe tip is 0.5mm to the EUT surface), 2 mm separation distance PD testing is for hotspot and body worn exposure conditions.
2. According to TCBC Workshop in October 2018, 4 cm<sup>2</sup> averaging area are used.

### 4.1 Measurement of RF Conducted Power

WIFI 6E Ant 1						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Average Power (dBm)	Tune up
U - NII - 5 6.2GHz	802.11a	1	5955	6Mbps	15.36	16.50
		45	6175		14.81	16.00
		93	6415		15.52	16.50
	802.11ax HEW20	1	5955	MCS0	9.93	11.00
		45	6175		9.45	10.50
		93	6415		10.14	11.00
	802.11ax HEW40	3	5965	MCS0	12.61	13.50
		43	6165		12.06	13.00
		91	6405		12.98	14.00
	802.11ax HEW80	7	5985	MCS0	14.83	16.00
		39	6145		13.98	15.00
		87	6385		14.80	16.00
	802.11ax HEW160	15	6025	MCS0	17.49	18.50
		47	6185		17.15	18.00
		79	6345		17.74	18.50
	802.11be EHT20	1	5955	MCS0	9.87	11.00
		45	6175		9.38	10.50
		93	6415		10.22	11.00
	802.11be EHT40	3	5965	MCS0	12.43	13.50
		43	6165		11.78	13.00
		91	6405		12.72	13.50
	802.11be EHT80	7	5985	MCS0	15.16	16.00
		39	6145		14.98	16.00
		87	6385		15.83	17.00
802.11be EHT160	15	6025	MCS0	17.62	19.00	
	47	6185		17.27	19.00	
	79	6345		17.82	19.00	
802.11be EHT320	31	6105	MCS0	17.22	19.00	
	63	6265		<b>17.78</b>	<b>19.00</b>	
U - NII - 6 6.5GHz	802.11a	97	6435	6Mbps	13.95	15.00
		105	6475		14.33	15.00
		113	6515		14.33	15.00
	802.11ax HEW20	97	6435	MCS0	10.10	11.00
		105	6475		10.46	11.50
		113	6515		10.25	11.50
	802.11ax	99	6445	MCS0	12.88	14.00



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	HEW40	107	6485		13.13	14.00
	802.11ax HEW80	103	6465	MCS0	14.35	15.00
		119	6545		14.22	15.00
	802.11ax HEW160	111	6505	MCS0	14.34	15.00
	802.11be EHT20	97	6435	MCS0	9.62	10.50
		105	6475		9.87	11.00
		113	6515		9.74	10.50
	802.11be EHT40	99	6445	MCS0	12.54	13.50
107		6485	12.79		14.00	
802.11be EHT80	103	6465	MCS0	14.46	15.00	
	119	6545		14.52	15.00	
802.11be EHT160	111	6505	MCS0	14.39	15.00	
802.11be EHT320	95	6425	MCS0	<b>14.55</b>	<b>15.00</b>	
U - NII - 7 6.7GHz	802.11a	117	6535	6Mbps	15.34	16.00
		149	6695		15.13	16.00
		181	6855		15.05	16.00
	802.11ax HEW20	117	6535	MCS0	9.56	10.50
		149	6695		10.04	11.00
		181	6855		10.27	11.50
	802.11ax HEW40	115	6525	MCS0	13.00	14.00
		147	6685		12.55	13.50
		179	6845		12.94	14.00
	802.11ax HEW80	135	6625	MCS0	13.90	15.00
		151	6705		14.30	15.00
		167	6785		14.50	15.00
	802.11ax HEW160	143	6665	MCS0	14.16	15.00
		175	6825		14.33	15.00
	802.11be EHT20	117	6535	MCS0	9.73	10.50
		149	6695		9.50	10.50
		181	6855		10.36	11.50
	802.11be EHT40	115	6525	MCS0	12.75	14.00
		147	6685		12.32	13.50
		179	6845		13.32	14.50
802.11be EHT80	135	6625	MCS0	14.59	15.00	
	151	6705		14.53	15.00	
	167	6785		14.80	15.00	
802.11be EHT160	143	6665	MCS0	14.36	15.00	
	175	6825		14.46	15.00	
802.11be EHT320	127	6585	MCS0	14.39	15.00	
	159	6745		<b>15.08</b>	<b>16.00</b>	
U - NII - 8 7.0GHz	802.11a	185	6875	6Mbps	12.40	13.00
		209	6995		11.64	13.00
		233	7115		11.51	13.00
	802.11ax HEW20	185	6875	MCS0	10.18	11.00
		209	6995		9.29	10.50
		233	7115		9.28	10.50
	802.11ax	187	6885	MCS0	12.68	13.50



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	HEW40	227	7085		12.60	13.50
	802.11ax HEW80	183	6865	MCS0	12.55	13.00
		199	6945		12.83	13.00
		215	7025		12.37	13.00
		207	6985		MCS0	12.63
	802.11be EHT20	185	6875	MCS0	10.35	11.50
		209	6995		9.37	10.50
		233	7115		9.52	10.50
	802.11be EHT40	187	6885	MCS0	13.31	14.00
		227	7085		12.44	13.50
	802.11be EHT80	183	6865	MCS0	13.60	14.00
		199	6945		12.89	14.00
		215	7025		13.15	14.00
	802.11be EHT160	207	6985	MCS0	12.87	14.00
	802.11be EHT320	191	6905	MCS0	<b>12.88</b>	<b>14.00</b>

WIFI 6E Ant 2						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Average Power (dBm)	Tune up
U - NII - 5 6.2GHz	802.11a	1	5955	6Mbps	15.79	17.00
		45	6175		14.99	16.00
		93	6415		15.55	16.50
	802.11ax HEW20	1	5955	MCS0	9.65	10.50
		45	6175		9.03	10.00
		93	6415		10.30	11.50
	802.11ax HEW40	3	5965	MCS0	12.44	13.50
		43	6165		11.37	12.50
		91	6405		12.38	13.50
	802.11ax HEW80	7	5985	MCS0	15.00	16.00
		39	6145		14.25	15.50
		87	6385		14.82	16.00
	802.11ax HEW160	15	6025	MCS0	17.59	18.50
		47	6185		17.15	18.00
		79	6345		17.51	18.50
	802.11be EHT20	1	5955	MCS0	10.30	11.50
		45	6175		9.55	10.50
		93	6415		10.57	11.50
	802.11be EHT40	3	5965	MCS0	13.04	14.00
		43	6165		12.31	13.50
		91	6405		13.19	14.00
	802.11be EHT80	7	5985	MCS0	15.72	16.50
		39	6145		15.49	16.50
		87	6385		16.13	17.00
802.11be EHT160	15	6025	MCS0	18.03	19.00	
	47	6185		17.66	19.00	
	79	6345		18.17	19.00	
802.11be EHT320	31	6105	MCS0	<b>17.76</b>	<b>19.00</b>	
	63	6265		17.73	19.00	



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U - NII - 6 6.5GHz	802.11a	97	6435	6Mbps	14.42	15.00
		105	6475		13.92	15.00
		113	6515		13.94	15.00
	802.11ax HEW20	97	6435	MCS0	10.36	11.50
		105	6475		9.97	11.00
		113	6515		9.93	11.00
	802.11ax HEW40	99	6445	MCS0	12.27	13.50
		107	6485		12.06	13.00
	802.11ax HEW80	103	6465	MCS0	14.13	15.00
		119	6545		14.15	15.00
	802.11ax HEW160	111	6505	MCS0	13.92	15.00
	802.11be EHT20	97	6435	MCS0	10.13	11.00
		105	6475		9.68	10.50
		113	6515		9.62	10.50
802.11be EHT40	99	6445	MCS0	13.03	14.00	
	107	6485		12.77	14.00	
802.11be EHT80	103	6465	MCS0	15.01	16.00	
	119	6545		14.32	15.00	
802.11be EHT160	111	6505	MCS0	14.28	15.00	
802.11be EHT320	95	6425	MCS0	<b>15.06</b>	<b>16.00</b>	
U - NII - 7 6.7GHz	802.11a	117	6535	6Mbps	14.63	15.00
		149	6695		14.91	15.00
		181	6855		15.05	16.00
	802.11ax HEW20	117	6535	MCS0	9.00	10.00
		149	6695		9.75	11.00
		181	6855		9.50	10.50
	802.11ax HEW40	115	6525	MCS0	12.44	13.50
		147	6685		11.95	13.00
		179	6845		12.16	13.00
	802.11ax HEW80	135	6625	MCS0	13.44	15.00
		151	6705		13.92	15.00
		167	6785		13.90	15.00
	802.11ax HEW160	143	6665	MCS0	13.73	15.00
		175	6825		14.02	15.00
	802.11be EHT20	117	6535	MCS0	9.29	10.50
		149	6695		9.60	10.50
		181	6855		9.75	11.00
	802.11be EHT40	115	6525	MCS0	12.65	13.50
		147	6685		12.65	13.50
		179	6845		12.98	14.00
	802.11be EHT80	135	6625	MCS0	14.88	15.00
151		6705	14.81		15.00	
167		6785	14.84		15.00	
802.11be EHT160	143	6665	MCS0	14.33	15.00	
	175	6825		14.05	15.00	
802.11be EHT320	127	6585	MCS0	14.37	15.00	
	159	6745		<b>15.11</b>	<b>16.00</b>	



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U - NII - 8 7.0GHz	802.11a	185	6875	6Mbps	11.40	12.00
		209	6995		11.02	12.00
		233	7115		11.02	12.00
	802.11ax HEW20	185	6875	MCS0	8.91	10.00
		209	6995		8.79	10.00
		233	7115		8.73	9.50
	802.11ax HEW40	187	6885	MCS0	12.65	13.50
		227	7085		11.93	13.00
	802.11ax HEW80	183	6865	MCS0	12.26	13.00
		199	6945		11.79	13.00
		215	7025		12.05	13.00
	802.11ax HEW160	207	6985	MCS0	12.17	13.00
	802.11be EHT20	185	6875	MCS0	10.04	11.00
		209	6995		9.44	10.50
		233	7115		9.40	10.50
	802.11be EHT40	187	6885	MCS0	12.85	14.00
227		7085	12.11		13.00	
802.11be EHT80	183	6865	MCS0	13.19	14.00	
	199	6945		13.25	14.00	
	215	7025		13.13	14.00	
802.11be EHT160	207	6985	MCS0	13.43	14.00	
802.11be EHT320	191	6905	MCS0	<b>13.20</b>	<b>14.00</b>	

WIFI 6E MIMO						
Band	Mode	Channel	Frequency (MHz)	Data Rate	Average Power (dBm)	Tune up
U - NII - 5 6.2GHz	802.11ax HEW20	1	5955	MCS0	12.80	13.50
		45	6175		12.26	13.00
		93	6415		13.23	14.50
	802.11ax HEW40	3	5965	MCS0	15.54	16.50
		43	6165		14.74	15.50
		91	6405		15.70	16.50
	802.11ax HEW80	7	5985	MCS0	17.93	19.00
		39	6145		17.13	18.50
		87	6385		17.82	19.00
	802.11ax HEW160	15	6025	MCS0	20.55	21.50
		47	6185		20.16	21.00
		79	6345		20.64	21.50
	802.11be EHT20	1	5955	MCS0	13.10	14.50
		45	6175		12.48	13.50
		93	6415		13.41	14.50
	802.11be EHT40	3	5965	MCS0	15.76	17.00
		43	6165		15.06	16.50
		91	6405		15.97	17.00
802.11be EHT80	7	5985	MCS0	18.46	19.50	
	39	6145		18.25	19.50	
	87	6385		18.99	20.00	
802.11be	15	6025	MCS0	20.84	22.00	



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	EHT160	47	6185	MCS0	20.48	22.00
		79	6345		21.01	22.00
	802.11be EHT320	31	6105		20.51	22.00
		63	6265		<b>20.77</b>	<b>22.00</b>
U - NII - 6 6.5GHz	802.11ax HEW20	97	6435	MCS0	13.24	14.50
		105	6475		13.23	14.00
		113	6515		13.10	14.00
	802.11ax HEW40	99	6445	MCS0	15.60	16.50
		107	6485		15.64	16.00
	802.11ax HEW80	103	6465	MCS0	17.25	18.00
		119	6545		17.20	18.00
	802.11ax HEW160	111	6505	MCS0	17.15	18.00
	802.11be EHT20	97	6435	MCS0	12.89	14.00
		105	6475		12.79	13.50
		113	6515		12.69	13.50
	802.11be EHT40	99	6445	MCS0	15.80	17.00
		107	6485		15.79	17.00
	802.11be EHT80	103	6465	MCS0	17.75	19.00
		119	6545		17.43	18.00
	802.11be EHT160	111	6505	MCS0	17.35	18.00
802.11be EHT320	95	6425	MCS0	<b>17.82</b>	<b>19.00</b>	
U - NII - 7 6.7GHz	802.11ax HEW20	117	6535	MCS0	12.30	13.00
		149	6695		12.91	14.00
		181	6855		12.91	13.50
	802.11ax HEW40	115	6525	MCS0	15.74	16.50
		147	6685		15.27	16.00
		179	6845		15.58	16.00
	802.11ax HEW80	135	6625	MCS0	16.69	18.00
		151	6705		17.12	18.00
		167	6785		17.22	18.00
	802.11ax HEW160	143	6665	MCS0	16.96	18.00
		175	6825		17.19	18.00
	802.11be EHT20	117	6535	MCS0	12.53	13.50
		149	6695		12.56	13.50
		181	6855		13.08	14.00
	802.11be EHT40	115	6525	MCS0	15.71	16.50
		147	6685		15.50	16.50
		179	6845		16.16	17.00
	802.11be EHT80	135	6625	MCS0	17.75	18.00
151		6705	17.68		18.00	
167		6785	17.83		18.00	
802.11be EHT160	143	6665	MCS0	17.36	18.00	
	175	6825		17.27	18.00	
802.11be EHT320	127	6585	MCS0	17.39	18.00	
	159	6745		<b>18.11</b>	<b>19.00</b>	
U - NII - 8 7.0GHz	802.11ax HEW20	185	6875	MCS0	12.60	13.00
		209	6995		12.06	13.00



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		233	7115		12.02	12.50
802.11ax HEW40		187	6885	MCS0	15.68	16.50
		227	7085		15.29	16.00
		183	6865		MCS0	15.42
802.11ax HEW80		199	6945	15.35		16.00
		215	7025	15.22		16.00
		207	6985	MCS0	15.42	16.00
802.11ax HEW160		185	6875	MCS0	13.21	14.00
		209	6995		12.42	13.50
		233	7115		12.47	13.50
802.11be EHT20		187	6885	MCS0	16.10	17.00
		227	7085		15.29	16.00
		183	6865		MCS0	16.41
802.11be EHT40		199	6945	16.08		17.00
		215	7025	16.15		17.00
		207	6985	MCS0	16.17	17.00
802.11be EHT160		191	6905	MCS0	<b>16.05</b>	<b>17.00</b>
802.11be EHT320						



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## 4.2 PD Test Data

Wi-Fi 6E PD Test Record MIMO															
Test position	Test mode	Test ch./Freq.	Distance (mm)	Grid Step (λ)	Duty Cycle	Duty Cycle Scaled factor	iPDn	iPD ratio	Measured PD 4cm <sup>2</sup> (W/m <sup>2</sup> )	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor for measurement uncertainty	Tune up Scaled factor	Scaled PD 4cm <sup>2</sup> (W/m <sup>2</sup> )
Power Density Test DATA															
Back side	802.11be EHT320	63/6265	2	0.0625	98.08%	1.02	/	/	0.548	0.01	20.77	22.00	1.5493	1.329	1.151
Left side	802.11be EHT320	63/6265	2	0.0625	98.08%	1.02	61.5	0.87	4.75	-0.01	20.77	22.00	1.5493	1.329	<b>9.975</b>
Left side	802.11be EHT320	63/6265	9.6	0.0625	98.08%	1.02	50.3		1.89	-0.02	20.77	22.00	1.5493	1.329	3.969
Right side	802.11be EHT320	63/6265	2	0.0625	98.08%	1.02	/	/	1.91	0.02	20.77	22.00	1.5493	1.329	4.011
Top side	802.11be EHT320	63/6265	2	0.0625	98.08%	1.02	/	/	4.04	-0.04	20.77	22.00	1.5493	1.329	8.484
Bottom side	802.11be EHT320	63/6265	2	0.0625	98.08%	1.02	/	/	2.87	-0.04	20.77	22.00	1.5493	1.329	6.027
Left side	802.11be EHT320	31/6105	2	0.0625	98.08%	1.02	/	/	4.45	0.08	20.51	22.00	1.5493	1.410	9.913
Left side	802.11be EHT320	95/6425	2	0.0625	98.08%	1.02	/	/	4.57	0.09	17.82	19.00	1.5493	1.311	9.471
Left side	802.11be EHT320	159/6745	2	0.0625	98.08%	1.02	/	/	4.78	0.09	18.11	19.00	1.5493	1.229	9.282
Left side	802.11be EHT320	191/6905	2	0.0625	98.08%	1.02	/	/	4.59	-0.17	16.05	17.00	1.5493	1.244	9.020
Left side-Sample2	802.11be EHT320	63/6265	2	0.0625	98.08%	1.02	/	/	4.62	0.08	20.77	22.00	1.5493	1.329	9.702



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### 5 Equipment list

Test Platform		SPEAG DASY Professional				
Description		PD Test System				
Software Reference		cDASY8 V3.0.0.841				
<b>Hardware Reference</b>						
	Equipment	Manufacturer	Model	Inventory No.	Calibration Date	Due date of calibration
<input checked="" type="checkbox"/>	Test Phantom	SPEAG	mmWave	SUWI-03-09-06	NCR	NCR
<input checked="" type="checkbox"/>	DAE	SPEAG	DAE4	SUWI-01-22-06	2025/2/17	2026/2/16
<input checked="" type="checkbox"/>	E-U Probe	SPEAG	EUmmWV4	SUWI-01-23-08	2024/8/23	2025/8/22
<input checked="" type="checkbox"/>	5G Verification Source	SPEAG	10GHz	SUWI-01-67-01	2024/8/20	2025/8/19
<input checked="" type="checkbox"/>	RF Bi-Directional Coupler	Agilent	86205-60001	SUWI-03-21-02	NCR	NCR
<input checked="" type="checkbox"/>	Signal Generator	ROHDE&SCHWARZ	SMB100A	SUWI-01-08-01	2025/1/16	2026/1/15
<input checked="" type="checkbox"/>	Preamplifier	QiJi	YX28982108	SUWI-03-25-02	NCR	NCR
<input checked="" type="checkbox"/>	Power Sensor	KEYSIGHT	U8481A	SUWI-01-40-03	2025/1/7	2026/1/6
<input checked="" type="checkbox"/>	Power Sensor	KEYSIGHT	U8481A	SUWI-01-40-04	2025/1/7	2026/1/6
<input checked="" type="checkbox"/>	Attenuator	SHX	TS2-3dB	SUWI-03-71-01	NCR	NCR
<input checked="" type="checkbox"/>	Humidity and Temperature Indicator	ASONE	THA-02L	SUWI-01-01-23	2024/9/18	2025/9/17



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### 6 Measurement Uncertainty

a	b	c	d	e	f=b*e/d	g
Error Description	Uncertainty Value (±dB)	Probability	Div.	Ci	Standard Uncertainty (±dB)	Vi (Veff)
Probe Calibration	0.49	N	1	1	0.49	∞
Probe correction	0.00	R	1.732	1	0.00	∞
Frequency response (BW ≤1 GHz)	0.20	R	1.732	1	0.12	∞
Sensor cross coupling	0.00	R	1.732	1	0.00	∞
Isotropy	0.50	R	1.732	1	0.29	∞
Linearity	0.20	R	1.732	1	0.12	∞
Probe scattering	0.00	R	1.732	1	0.00	∞
Probe positioning offset	0.30	R	1.732	1	0.17	∞
Probe positioning repeatability	0.04	R	1.732	1	0.02	∞
Sensor mechanical offset	0.00	R	1.732	1	0.00	∞
Probe spatial resolution	0.00	R	1.732	1	0.00	∞
Field impedance dependance	0.00	R	1.732	1	0.00	∞
Amplitude and phase drift	0.00	R	1.732	1	0.00	∞
Amplitude and phase noise	0.04	R	1.732	1	0.02	∞
Measurement area truncation	0.00	R	1.732	1	0.00	∞
Data acquisition	0.03	N	1	1	0.03	∞
Sampling	0.00	R	1.732	1	0.00	∞
Field reconstruction	2.00	R	1.732	1	1.15	∞
Forward transformation	0.00	R	1.732	1	0.00	∞
Power density scaling	0.00	R	1.732	1	0.00	∞
Spatial averaging	0.10	R	1.732	1	0.06	∞
System detection limit	0.04	R	1.732	1	0.02	∞
Probe coupling with DUT	0.00	R	1.732	1	0.00	∞
Modulation response	0.40	R	1.732	1	0.23	∞
Integration time	0.00	R	1.732	1	0.00	∞
Response time	0.00	R	1.732	1	0.00	∞
Device holder influence	0.10	R	1.732	1	0.06	∞
DUT alignment	0.00	R	1.732	1	0.00	∞
RF ambient conditions	0.04	R	1.732	1	0.02	∞
Ambient reflections	0.04	R	1.732	1	0.02	∞
Immunity / secondary reception	0.00	R	1.732	1	0.00	∞
Drift of the DUT		R	1.732	1	0.00	∞
Combined Std. Uncertainty					1.33	
Expanded STD Uncertainty (95%), K=2					2.67	



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### **7 Calibration certificate**

Please see the Appendix C

### **8 Photographs**

Please see the Appendix D

## **Appendix A: Detailed System Check Results**

## **Appendix B: Detailed Test Results**

## **Appendix C: Calibration certificate**

## **Appendix D: Photographs**

**---END---**

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