

# **Appendix B - DAE & Probe Calibration Certificate**

Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurio	ry of		S         Schweizerischer Kalibrierdienst           C         Service suisse d'étalonnage           S         Servizio svizzero di taratura           S         Suisse Calibration Service
Accredited by the Swiss Accredit The Swiss Accreditation Servic Multilateral Agreement for the	ce is one of the signatories	to the EA	tion No.: SCS 0108
Client SGS-TW (Aud	999 <b>4</b>		No: DAE4-547_Mar22
CALIBRATION	CERTIFICATE		
Object	DAE4 - SD 000 D	04 BM - SN: 547	
Calibration procedure(s)	QA CAL-06.v30 Calibration procee	dure for the data acquisition el	ectronics (DAE)
Calibration date:	March 23, 2022		
The measurements and the unco	ertainties with confidence pro	nal standards, which realize the physical bability are given on the following pages facility: environment temperature ( $22 \pm 3$	and are part of the certificate.
The measurements and the unce All calibrations have been condu Calibration Equipment used (M&	ertainties with confidence pro ucted in the closed laboratory .TE critical for calibration)	bability are given on the following pages	and are part of the certificate. 3)°C and humidity < 70%.
The measurements and the unci All calibrations have been condu Calibration Equipment used (M& Primary Standards	ertainties with confidence pro incted in the closed laboratory TE critical for calibration)	bability are given on the following pages facility: environment temperature (22 ± 3 Cal Date (Certificate No.)	and are part of the certificate. i)°C and humidity < 70%. Scheduled Calibration
The measurements and the unci All calibrations have been condu Calibration Equipment used (M& Primary Standards	ertainties with confidence pro ucted in the closed laboratory .TE critical for calibration)	bability are given on the following pages	and are part of the certificate. 3)°C and humidity < 70%.
The measurements and the unci- All calibrations have been condu- Calibration Equipment used (M& Primary Standards Keithley Multimeter Type 2001 Secondary Standards	ertainties with confidence pro- acted in the closed laboratory TE critical for calibration) ID # SN: 0810278 ID #	bability are given on the following pages facility: environment temperature (22 ± 3 Cal Date (Certificate No.) 31-Aug-21 (No:31368) Check Date (in house)	and are part of the certificate. i)°C and humidity < 70%. Scheduled Calibration
The measurements and the unco All calibrations have been condu Calibration Equipment used (M& Primary Standards Keithley Multimeter Type 2001	trainties with confidence providence providence providence of the closed laboratory     TE critical for calibration)     ID #     SN: 0810278     ID #     SE UWS 053 AA 1001	bability are given on the following pages facility: environment temperature (22 ± 3 <u>Cal Date (Certificate No.)</u> 31-Aug-21 (No:31368)	and are part of the certificate. 3)°C and humidity < 70%. Scheduled Calibration Aug-22
The measurements and the unci- All calibrations have been condu- Calibration Equipment used (M& <u>Primary Standards</u> Keithley Multimeter Type 2001 <u>Secondary Standards</u> Auto DAE Calibration Unit	trainties with confidence providence providence providence of the closed laboratory     TE critical for calibration)     ID #     SN: 0810278     ID #     SE UWS 053 AA 1001	bability are given on the following pages facility: environment temperature (22 ± 3 Cal Date (Certificate No.) 31-Aug-21 (No:31368) Check Date (in house) 24-Jan-22 (in house check)	and are part of the certificate. 3)°C and humidity < 70%. Scheduled Calibration Aug-22 Scheduled Check In house check: Jan-23 In house check: Jan-23 Signature
The measurements and the unci- All calibrations have been condu- Calibration Equipment used (M& Primary Standards Keithley Multimeter Type 2001 Secondary Standards Auto DAE Calibration Unit Calibrator Box V2.1	Artainties with confidence providence providence of the closed laboratory and critical for calibration)  ID # SN: 0810278  ID # SE UWS 053 AA 1001 SE UWS 006 AA 1002 Name	Date (Certificate No.)         31-Aug-21 (No:31368)         Check Date (in house)         24-Jan-22 (in house check)         24-Jan-22 (in house check)	and are part of the certificate. 3)°C and humidity < 70%. Scheduled Calibration Aug-22 Scheduled Check In house check: Jan-23 In house check: Jan-23

Certificate No: DAE4-547\_Mar22

Page 1 of 5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) lested and such sample(s) are retained to 90 days only. Mir#JSfabity i, Lt&Bateger and the company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fulleest extent of the law. prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488

www.sqs.com.tw



# Report No: TESA2212000576E5 Page: 2 of 27

Calibration Laboratory of Schmid & Partner Engineering AG eughausstrasse 43, 8004 Zurich, Switzerland



Schweizerischer Kalibrierdienst S Service suisse d'étalonnage С Servizio svizzero di taratura S Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

### Glossary

DAE Connector angle

data acquisition electronics information used in DASY system to align probe sensor X to the robot coordinate system.

### Methods Applied and Interpretation of Parameters

- DC Voltage Measurement: Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- Connector angle: The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The following parameters as documented in the Appendix contain technical information as a result from the performance test and require no uncertainty.
  - DC Voltage Measurement Linearity: Verification of the Linearity at +10% and -10% of . the nominal calibration voltage. Influence of offset voltage is included in this measurement.
  - Common mode sensitivity: Influence of a positive or negative common mode voltage on the differential measurement.
  - . Channel separation: Influence of a voltage on the neighbor channels not subject to an input voltage.
  - AD Converter Values with inputs shorted: Values on the internal AD converter corresponding to zero input voltage
  - Input Offset Measurement: Output voltage and statistical results over a large number of zero voltage measurements.
  - . Input Offset Current: Typical value for information; Maximum channel input offset current, not considering the input resistance.
  - Input resistance: Typical value for information: DAE input resistance at the connector, during internal auto-zeroing and during measurement.
  - Low Battery Alarm Voltage: Typical value for information. Below this voltage, a battery alarm signal is generated.
  - Power consumption: Typical value for information. Supply currents in various operating modes

Certificate No: DAE4-547\_Mar22

Page 2 of 5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

f (886-2) 2298-0488



### **DC Voltage Measurement**

High Range:	1LSB =	6.1µV,	full range =	-100+300 mV
Low Range:	1LSB =	61nV,	full range =	-1+3mV
ASY measurement				

<b>Calibration Factors</b>	X	Y	z
High Range	403.263 ± 0.02% (k=2)	403.168 ± 0.02% (k=2)	402.814 ± 0.02% (k=2)
Low Range	3.95496 ± 1.50% (k=2)	3.90574 ± 1.50% (k=2)	3.96252 ± 1.50% (k=2)

### **Connector Angle**

91.0°±1°

Certificate No: DAE4-547\_Mar22

Page 3 of 5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report reter only to the sample(s) lested and such sample(s) are retained to 90 days only. Mir#JSfabity i, Lt&Bateger and the company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fulleest extent of the law. prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488



# Report No: TESA2212000576E5 Page: 4 of 27

### Appendix (Additional assessments outside the scope of SCS0108)

### 1. DC Voltage Linearity

High Range		Reading (µV)	Difference (µV)	Error (%)
Channel X	+ Input	200028.90	-2.05	-0.00
Channel X	+ Input	20008.26	2.76	0.01
Channel X	- Input	-20002.14	3.24	-0.02
Channel Y	+ Input	200027.70	-2.88	-0.00
Channel Y	+ Input	20002.66	-2.66	-0.01
Channel Y	- Input	-20005.95	-0.47	0.00
Channel Z	+ Input	200028.95	-2.21	-0.00
Channel Z	+ Input	20006.74	1.45	0.01
Channel Z	- Input	-20004.25	1.30	-0.01

Channel X + Input Channel X + Input	2001.43	0.29	0.01
Channel X + Input	201.13		
- input		-0.00	-0.00
Channel X - Input	-198.80	0.04	-0.02
Channel Y + Input	2001.21	0.20	0.01
Channel Y + Input	200.72	-0.23	-0.11
Channel Y - Input	-199.87	-0.95	0.48
Channel Z + Input	2000.92	-0.07	-0.00
Channel Z + Input	200.39	-0.58	-0.29
Channel Z - Input	-199.79	-0:75	0.38

### 2. Common mode sensitivity

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	Common mode Input Voltage (mV)	High Range Average Reading (μV)	Low Range Average Reading (µV)
Channel X	200	-2.99	-5.04
	- 200	5.30	3.82
Channel Y	200	-1,16	-1.29
Y 22	- 200	-0.72	-0.92
Channel Z	200	5.69	5.56
	- 200	-7.06	-7.99

### 3. Channel separation

DASY measurement parameters:	Auto Zero	Time: 3 sec;	Measuring	time: 3 sec	

1	Input Voltage (mV)	Channel X (µV)	Channel Y (µV)	Channel Z (µV)
Channel X	200		2.57	-2.07
Channel Y	200	9.72	1	3.76
Channel Z	200	5.10	7.37	1

Certificate No: DAE4-547\_Mar22

Page 4 of 5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留的天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents issued by the Company subject to its General Conductors and every printed overlear, available on request of accessible at <u>http://www.sgs.com.tw/Terms-and-Conditions</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488



# Report No: TESA2212000576E5 Page: 5 of 27

### 4. AD-Converter Values with inputs shorted

DASY me	asurement para	meters: Auto	Zero Time:	3 sec; Meas	suring time: 3 sec	0

	High Range (LSB)	Low Range (LSB)
Channel X	16358	14774
Channel Y	16463	15455
Channel Z	16085	17195

### 5. Input Offset Measurement

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec Input 10MΩ

	Average (µV)	min. Offset (μV)	max. Offset (μV)	Std. Deviation (µV)
Channel X	-0.14	-1.02	0.61	0.28
Channel Y	-0.31	-0.92	0.40	0.31
Channel Z	0.26	-1.17	1.50	0.46

#### 6. Input Offset Current

Nominal Input circuitry offset current on all channels: <25fA

### 7. Input Resistance (Typical values for information)

	Zeroing (kOhm)	Measuring (MOhm)		
Channel X	200	200		
Channel Y	200	200		
Channel Z	200	200		

### 8. Low Battery Alarm Voltage (Typical values for information)

Typical values	Alarm Level (VDC)		
Supply (+ Vcc)	+7.9		
Supply (- Vcc)	-7.6		

### 9. Power Consumption (Typical values for information)

Typical values	Switched off (mA)	Stand by (mA)	Transmitting (mA)	
Supply (+ Vcc)	+0.01	+6	+14	
Supply (- Vcc)	-0.01	-8	-9	

Certificate No: DAE4-547\_Mar22

Page 5 of 5

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

```
www.sqs.com.tw
```



# Report No: TESA2212000576E5 Page: 6 of 27

ngineering AG eughausstrasse 43, 8004 Zu	rich Switzerland		Servizio svizzero di taratura
coredited by the Swiss Accre the Swiss Accreditation Ser ultilateral Agreement for th	editation Service (SAS) rvice is one of the signat	ories to the EA	ccreditation No.: SCS 0108
ient SGS (Auden	)	Certificate No	EX-7686_Sep22
CALIBRATION C	ERTIFICATE		
Object	EX3DV4 - SN:7	686	
Calibration procedure(s)	QA CAL-25.v7	QA CAL-12.v9, QA CAL-14.v6, Q	
Calibration date	September 27,	2022	
The measurements and the All calibrations have been co	uncertainties with confiden- onducted in the closed labor	national standards, which realize the physica ce probability are given on the following page ratory facility: environment temperature (22 ± m)	s and are part of the certificate.
The measurements and the NI calibrations have been co Calibration Equipment used	uncertainties with confiden- onducted in the closed labor (M&TE critical for calibratio	ce probability are given on the following page ratory facility: environment temperature (22 $\pm$ m)	s and are part of the certificate. 3) °C and humidity < 70%.
he measurements and the ul calibrations have been co alibration Equipment used rimary Standards	uncertainties with confiden enducted in the closed labor (M&TE critical for calibratio	ce probability are given on the following page ratory facility: environment temperature (22 ± n) Cal Date (Certificate No.)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration
he measurements and the II calibrations have been co allibration Equipment used imary Standards ower meter NRP	uncertainties with confiden enducted in the closed labor (M&TE critical for calibratio	ce probability are given on the following page ratory facility: environment temperature (22 ± m) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23
he measurements and the all calibrations have been co alibration Equipment used rimary Standards ower meter NRP ower sensor NRP-Z91	uncertainties with confiden onducted in the closed labor (M&TE critical for calibratio ID SN: 104778 SN: 10474	ce probability are given on the following page ratory facility: environment temperature (22 ± m) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23
he measurements and the ill calibrations have been co calibration Equipment used rimary Standards ower meter NRP- sower sensor NRP-Z91 GP DAK-3.5 (weighted)	uncertainties with confiden- inducted in the closed labor (M&TE critical for calibratio) ID SN: 104778 SN: 10474 SN: 103244 SN: 103249	ce probability are given on the following page ratory facility: environment temperature (22 ± m) Cal Date (Certificate No.) O4-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03525/03524) 24-Oct-21 (OCP-DAK3-5-1249_Oct21)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22
the measurements and the ul calibrations have been co alibration Equipment used rimary Standards ower meter NRP ower sensor NRP-Z91 CP DAK-3.5 (weighted) CP DAK-3.5	uncertainties with confiden enducted in the closed labor (M&TE critical for calibratio ID SN: 104778 SN: 103244 SN: 103244 SN: 1249 SN: 1016	ce probability are given on the following page ratory facility: environment temperature (22 ± n) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 20-Oct-21 (OCP-DAK3.5-1249_Oct21) 20-Oct-21 (OCP-DAK3.5-1016_Oct21)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22 Oct-22
The measurements and the VI calibrations have been co Calibration Equipment used rimary Standards ower sensor NRP-291 CP DAK-3.5 (weighted) CP DAK-3.5 (weighted) CP DAK-3.2 d B Attenuator	uncertainties with confiden- inducted in the closed labor (M&TE critical for calibratio) ID SN: 104778 SN: 10474 SN: 103244 SN: 103249	ce probability are given on the following page ratory facility: environment temperature (22 ± n) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 20-Oct-21 (OCP-DAK3.5-1249_Oct21) 20-Oct-21 (OCP-DAK3.5-1249_Oct21) 04-Apr-22 (No. 217-03527)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22 Oct-22 Apr-23
The measurements and the subsection of the second second calibration Equipment used rimary Standards ower meter NRP. Second Standards ower sensor NRP-Z91 CP DAK-32 (weighted) CP DAK-12 eference 20 dB Attenuator AE4	uncertainties with confiden- inducted in the closed labor (M&TE critical for calibratio SN: 104778 SN: 104778 SN: 103244 SN: 1249 SN: 1249 SN: 1016 SN: CC2552 (20x)	ce probability are given on the following page ratory facility: environment temperature (22 ± n) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 20-Oct-21 (OCP-DAK3.5-1249_Oct21) 20-Oct-21 (OCP-DAK3.5-1016_Oct21)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22 Oct-22
The measurements and the VI calibrations have been co Calibration Equipment used rimary Standards ower meter NRP. Ower sensor NRP.291 ICP DAK-3.5 (weighted) ICP DAK-3.5 (weighted) ICP DAK-12 eference 20 dB Attenuator AE4 eference Probe ES3DV2	uncertainties with confiden- inducted in the closed labor (M&TE critical for calibratio SN: 104778 SN: 104778 SN: 104778 SN: 10478 SN: 1249 SN: 1016 SN: 1016 SN: 20552 (20x) SN: 660 SN: 3013	ce probability are given on the following page ratory facility: environment temperature (22 ± n) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 20-0ct-21 (OCP-DAK3.5-1249_Oct21) 20-0ct-21 (OCP-DAK3.5-1249_Oct21) 04-Apr-22 (No. 217-03527) 13-0ct-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. ES3-3013_Dec21)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22 Oct-22 Oct-22 Oct-22 Dec-22 Dec-22
The measurements and the VII calibrations have been oc Calibration Equipment used trimary Standards ower meter NRP ower sensor NRP-291 (CP DAK-32 (weighted)) CP DAK-12 eference 20 dB Attenuator AE4 eference Probe ES3DV2 econdary Standards	uncertainties with confiden- onducted in the closed labor (M&TE critical for calibratio SN: 104778 SN: 103244 SN: 103244 SN: 103244 SN: 103249 SN: 103249 SN: 1016 SN: CC2552 (20x) SN: 660 SN: 3013	ce probability are given on the following page ratory facility: environment temperature (22 ± m) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03525/03524) 20-Oct-21 (OCP-DAK)5-1249_Oct21) 20-Oct-21 (OCP-DAK)5-1249_Oct21) 20-Oct-21 (No. DAE+650_Oct21) 13-Oct-21 (No. DAE+650_Oct21) 27-Dec-21 (No. ES3-3013_Dec21) Check Date (in house)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22 Oct-22 Oct-22 Oct-22 Dec-22 Dec-22 Scheduled Check
The measurements and the VI calibrations have been co Calibration Equipment used rimary Standards ower enter NRP- Were sensor NRP-291 CP DAK-35 (weighted) ICP DAK-35 (weighted) ICP DAK-35 (weighted) ICP DAK-35 (weighted) ICP CAK-35 (weighted	uncertainties with confiden- inducted in the closed labor (M&TE critical for calibratio SN: 104778 SN: 104778 SN: 104778 SN: 1249 SN: 1249 SN: 1249 SN: 106 SN: 00552 (20x) SN: 660 SN: 3013 ID SN: GB41293874	ce probability are given on the following page ratory facility: environment temperature (22 ± n) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03525/03524) 20-Oct-21 (OCP-DAK3-5-1248 Oct21) 20-Oct-21 (OCP-DAK3-5-1248 Oct21) 20-Oct-21 (OCP-DAK3-5-1248 Oct21) 04-Apr-22 (No. 217-03527) 13-Oct-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. DAE4-660_Oct21)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22 Oct-22 Oct-22 Dec-22 Dec-22 Scheduled Check In house check. Jun-24
The measurements and the All calibrations have been co Calibration Equipment used trimary Standards ower meter NRP- ower sensor NRP-Z91 OCP DAK-35 (weighted) OCP DAK-35 (weighted) OCP DAK-35 (weighted) Ideference 20 dB Attenuator IAE4 leference Probe ES3DV2 econdary Standards ower sensor E44128	uncertainties with confiden- onducted in the closed labor (M&TE critical for calibratio SN: 104778 SN: 103244 SN: 103244 SN: 103244 SN: 103249 SN: 103249 SN: 1016 SN: CC2552 (20x) SN: 660 SN: 3013	ce probability are given on the following page ratory facility: environment temperature (22 ± n) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03526) 20-Oct-21 (OCP-DAK13-1249_Oct21) 20-Oct-21 (OCP-DAK13-1016_Oct21) 04-Apr-22 (No. 217-03527) 13-Oct-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. E53-3013_Dec21) Check Date (in house check Jun-22) 06-Apr-16 (in house check Jun-22)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22 Oct-22 Oct-22 Dec-22 Dec-22 Dec-22 Scheduled Check In house check: Jun-24 In house check: Jun-24
The measurements and the All calibrations have been co Calibration Equipment used trimary Standards ower meter NRP- Werk Senson (NRP-291 OP DAK-3.5 (weighted) OP DAK-3.5 (weighted) OP DAK-12 leference 20 dB Attenuator AE4 leference Probe ES3DV2 econdary Standards ower meter E44198 ower sensor E4412A	uncertainties with confiden- inducted in the closed labor (M&TE critical for calibratio SN: 104778 SN: 104778 SN: 10474 SN: 10244 SN: 1016 SN: 20552 (20x) SN: 660 SN: 3013 D SN: GB41293874 SN: V41498087	ce probability are given on the following page ratory facility: environment temperature (22 ± m) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03525/03524) 20-Oct-21 (OCP-DAK3-1249, Oct21) 20-Oct-21 (OCP-DAK1-1016, Oct21) 04-Apr-22 (No. 217-03527) 13-Oct-21 (No. DAE4-660_Oct21) 27-Oce-21 (No. DAE4-660_Oct21) 27-Oce-21 (No. DAE4-660_Oct21) Check Date (in house check Jun-22) 06-Apr-16 (in house check Jun-22) 06-Apr-16 (in house check Jun-22)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22 Oct-22 Oct-22 Dec-22 Dec-22 Scheduled Check In house check: Jun-24 In house check: Jun-24 In house check: Jun-24
The measurements and the All calibrations have been co Calibration Equipment used trimary Standards tower meter NRP. Core DAK-3.5 (weighted) CP DAK-3.5 (weighted) CP DAK-3.5 (weighted) CP DAK-20 dB Attenuator AE4 feference 20 dB Attenuator AE4 leference Probe ES3DV2 econdary Standards ower meter E4419B ower sensor E4412A Were sensor E4412A F generator HP 8848C	uncertainties with confiden- inducted in the closed labor (M&TE critical for calibratio SN: 104778 SN: 104778 SN: 103244 SN: 1249 SN: 1249 SN: 1249 SN: C2552 (20x) SN: 660 SN: 3013 ID SN: GB41293874 SN: MY41498087 SN: 00210 2010	ce probability are given on the following page ratory facility: environment temperature (22 ± n) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03526) 20-Oct-21 (OCP-DAK13-1249_Oct21) 20-Oct-21 (OCP-DAK13-1016_Oct21) 04-Apr-22 (No. 217-03527) 13-Oct-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. E53-3013_Dec21) Check Date (in house check Jun-22) 06-Apr-16 (in house check Jun-22)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22 Oct-22 Oct-22 Dec-22 Dec-22 Dec-22 Scheduled Check In house check: Jun-24 In house check: Jun-24
The measurements and the All calibrations have been co Calibration Equipment used Primary Standards Nower sensor NRP-291 DCP DAK-35 (weighted) DCP DAK-35 (weighted) DCP DAK-12 eleference 20 dB Attenuator JAE4 Reference 20 dB Attenuator JAE4 Nower meter E4419B Nower sensor E4412A Ower sensor E4412A Ower sensor E4412A	uncertainties with confiden- inducted in the closed labor (M&TE critical for calibratio SN: 104778 SN: 104778 SN: 104778 SN: 10478 SN: 10478 SN: 10478 SN: 10478 SN: 10478 SN: 10478 SN: 10478 SN: 10478 SN: 20244 SN: 20252 SN: 2025 SN: 2	ce probability are given on the following page ratory facility: environment temperature (22 ± n) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03526/03524) 04-Apr-22 (No. 217-03526) 20-Cit-21 (OCP-DAK15-1016_Oct21) 04-Apr-22 (No. 217-03527) 13-Oct-21 (OCP-DAK15-1016_Oct21) 04-Apr-22 (No. 217-03527) 13-Oct-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. ES3-3013_Dec21) Check Date (in house check Jun-22) 06-Apr-16 (in house check Jun-22) 06-Apr-16 (in house check Jun-22) 06-Apr-16 (in house check Jun-22) 31-Mar-14 (in house check Jun-22)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22 Oct-22 Dec-22 Dec-22 Scheduled Check In house check: Jun-24 In house check: Oct-22
The measurements and the All calibrations have been co Calibration Equipment used Primary Standards Dover meter NRP. Dover sensor NRP.291 DOP DAK-12 Eleference 20 dB Attenuator DAE.4 Eleference 20 dB Attenuator DAE.4 Eleference Probe ES3DV2 Becondary Standards Dover meter E44198 Dover sensor E4412A Dover sensor E4412A Dover sensor E4412A Dover sensor E4412A Eleference 2412A Elevendary Standards Dover sensor E4412A Elevendary Standards Dover sensor E4412A Elevendary E4412B	uncertainties with confiden- inducted in the closed labor (M&TE critical for calibratio SN: 104778 SN: 104778 SN: 104778 SN: 10478 SN: 1016 SN: 1016 SN: 20244 SN: 1016 SN: 20244 SN: 1016 SN: 20244 SN: 20244 SN: 20252 (20x) SN: 2034 SN: 200410210 SN: 000110210 SN: 000110210 SN: 000110210 SN: US41080477 Name	ce probability are given on the following page ratory facility: environment temperature (22 ± n) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03526/03524) 20-Oct-21 (OCP-DAK3.5-1249_Oct21) 20-Oct-21 (OCP-DAK3.5-1249_Oct21) 20-Oct-21 (OCP-DAK3.5-1249_Oct21) 27-Dec-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. DAE4-660_Oct21) 06-Apr-16 (in house check Jun-22) 06-Apr-16 (in house check Jun-22)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22 Oct-22 Oct-22 Oct-22 Dec-22 Scheduled Check In house check: Jun-24 In house check: Jun-24 In house check: Jun-24 In house check: Jun-24 In house check: Oct-22 Signature
The measurements and the All calibrations have been co Calibration Equipment used Primary Standards Power sensor NRP-291 OCP DAK-35 (weighted) OCP DAK-35 (weighted) OCP DAK-12 Reference 20 dB Attenuator DAE4 Reference Probe ES3DV2 Secondary Standards Power meter E44198 Power sensor E4412A Tower sensor E4412A Tower sensor E4412A Reference P4412A Reference E4412A Reference E4412A Reference E4412B Power sensor E4412A	uncertainties with confiden- inducted in the closed labor (M&TE critical for calibratio SN: 104778 SN: 104778 SN: 104778 SN: 10478 SN: 10478 SN: 10478 SN: 10478 SN: 10478 SN: 10478 SN: 10478 SN: 10478 SN: 20244 SN: 20252 SN: 2025 SN: 2	ce probability are given on the following page ratory facility: environment temperature (22 ± n) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03526/03524) 04-Apr-22 (No. 217-03526) 20-Cit-21 (OCP-DAK15-1016_Oct21) 04-Apr-22 (No. 217-03527) 13-Oct-21 (OCP-DAK15-1016_Oct21) 04-Apr-22 (No. 217-03527) 13-Oct-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. ES3-3013_Dec21) Check Date (in house check Jun-22) 06-Apr-16 (in house check Jun-22) 06-Apr-16 (in house check Jun-22) 06-Apr-16 (in house check Jun-22) 31-Mar-14 (in house check Jun-22)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22 Oct-22 Oct-22 Oct-22 Dec-22 Scheduled Check In house check: Jun-24 In house check: Jun-24 In house check: Jun-24 In house check: Jun-24 In house check: Oct-22 Signature
The measurements and the All calibrations have been co Calibration Equipment used Primary Standards Power meter NRP Power sensor NRP-291 DCP DAK-35 (weighted) DCP DAK-12 aference 20 dB Attenuator DAE4 Paterence 20 dB Attenuator DAE4 Paterence Probe ES3DV2 Secondary Standards Power sensor E4412A Power sensor E4412A Power sensor E4412A Power sensor E4412A Power sensor E4412A Power sensor E4412A Paterence Probe ES3DV2 Secondary Standards Paterence 20 dB Attenuator DAE4 Paterence 20 dB Attenuator DAE4 Paterence Probe ES3DV2 Power sensor E4412A Power sensor E4412A Power sensor E4412A Power sensor E4412A Paterence Probe E53DV2 Paterence Probe E53DV2 Power sensor E4412A Paterence Probe E53DV2 Paterence Paterence Probe E53DV2 Paterence Probe E53DV2 Paterence Probe E53DV2 Paterence Probe E53DV2 Paterence Probe E53DV2 Paterence Paterence Probe E53DV2 Paterence Paterence Probe E53DV2 Paterence Paterence Pate	uncertainties with confiden- inducted in the closed labor (M&TE critical for calibratio SN: 104778 SN: 104778 SN: 104778 SN: 10478 SN: 1016 SN: 1016 SN: 20244 SN: 1016 SN: 20244 SN: 1016 SN: 20244 SN: 20244 SN: 20252 (20x) SN: 2034 SN: 200410210 SN: 000110210 SN: 000110210 SN: 000110210 SN: US41080477 Name	ce probability are given on the following page ratory facility: environment temperature (22 ± n) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 20-0ct-21 (OCP-DAK3.5-1249_Oct21) 20-0ct-21 (OCP-DAK3.5-1249_Oct21) 04-Apr-22 (No. 217-03527) 13-Oct-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. DAE4-660_Oct21) 06-Apr-16 (in house check Jun-22) 06-Apr-16 (in house check Jun-22) 06-Apr-16 (in house check Jun-22) 31-Mar-14 (in house check Jun-22) 31-Mar-14 (in house check Jun-22)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22 Oct-22 Dec-22 Dec-22 Scheduled Check In house check: Jun-24 In house check: Oct-22
The measurements and the All calibrations have been co Calibration Equipment used Primary Standards Power meter NRP- Power sensor NRP-291 DCP DAK-3.5 (weighted) DCP DAK-3.5 (weighted)	uncertainties with confiden- inducted in the closed labor (M&TE critical for calibratio SN: 104778 SN: 104778 SN: 104778 SN: 10478 SN: 1249 SN: 1016 SN: 20244 SN: 1249 SN: 1016 SN: 20244 SN: 20244 SN: 20244 SN: 20244 SN: 20252 (20x) SN: 203424 SN: 20252 (20x) SN: 203424 SN: 20252 (20x) SN: 20252 (20x)	ce probability are given on the following page ratory facility: environment temperature (22 ± n) Cal Date (Certificate No.) 04-Apr-22 (No. 217-03524) 20-Cit-21 (No. 217-03524) 20-Cit-21 (No. 217-03524) 20-Cit-21 (No. 217-03524) 20-Cit-21 (No. 217-03527) 13-Oct-21 (No. DAE4-660_Oct21) 27-Dec-21 (No. ES3-3013_Dec21) Check Date (in house check Jun-22) 06-Apr-16 (in house check Jun-22) 06-Apr-16 (in house check Jun-22) 31-Mar-14 (in house check Jun-22) 31-Mar-14 (in house check Jun-22) 31-Mar-14 (in house check Jun-22) Check Date (not check Jun-22) 04-Aug-9 (in house check Jun-22) 31-Mar-14 (in house check Jun-22)	s and are part of the certificate. 3) °C and humidity < 70%. Scheduled Calibration Apr-23 Apr-23 Oct-22 Oct-22 Dec-22 Dec-22 Scheduled Check In house check: Jun-24 In house check ch

Certificate No: EX-7686\_Sep22

Page 1 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Unless otherwise stated the results shown in this test report reter only to the sample(s) lested and such sample(s) are retained to 90 days only. Mir#JSfabity i, Lt&Bateger and the company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fulleest extent of the law. prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488



# Report No: TESA2212000576E5 Page: 7 of 27

Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



Schweizerischer Kallbrierdienst Service suisse d'étalonnage Servizio svizzero di taratura Swiss Calibration Service

s

С

S

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

#### Glossarv

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization $\varphi$	φ rotation around probe axis
Polarization $\vartheta$	$\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta$ = 0 is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

#### Calibration is Performed According to the Following Standards:

- a) IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
   b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization θ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E2-field uncertainty inside TSL (see below ConvE)
- NORM(/)x,yz \* INORMx,yz \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF
- DCPx, y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal. DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
   Ax, y,z; Bx, y,z; Ox, y,z; Dx, y,z; VRx, y,z; A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for  $f \le 800$  MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to import a course close to the boundary. The sensitivity in TSL corresponds to NORMx, y.z \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- · Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

Certificate No: EX-7686\_Sep22

Page 2 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488

www.sqs.com.tw



# Report No: TESA2212000576E5 Page: 8 of 27

#### EX3DV4 - SN:7686

### September 27, 2022

### Parameters of Probe: EX3DV4 - SN:7686

**Basic Calibration Parameters** 

	Sensor X	Sensor Y	Sensor Z	Unc $(k = 2)$
Norm (µV/(V/m)2) A	0.68	0.66	0.52	±10.1%
DCP (mV) B	105.0	104.5	101.8	±4.7%

### **Calibration Results for Modulation Response**

UID	Communication System Name		A dB	B dBõV	c	D dB	VR mV	Max dev.	Max Unc <sup>E</sup> k = 2
0	CW	X	0.00	0.00	1.00	0.00	160.8	±3.0%	±4.7%
		Y	0.00	0.00	1.00		169.3		
	the second second second	Z	0.00	0.00	1.00		169.0	100 a 1	100
10352	Pulse Waveform (200Hz, 10%)	X	1.33	60.00	5.88	10.00	60.0	±3.0%	±9.6%
	Contract set of the set	Y	1.59	60.97	6.43		60.0		
		Z	1.41	60.34	6.27		60.0		
10353	Pulse Waveform (200Hz, 20%)	X	0.82	60.00	4.70	6.99	80.0	±2.5%	±9.6%
	10174 SALET # 16 241	Y	0.78	60.00	4.78		80.0	1000	10.00
	and a second second	Z	0.78	60.00	4.90		80.0		
10354	Pulse Waveform (200Hz, 40%)	X	0.03	130.22	0.01	3.98	95.0	±2.6%	±9.6%
		Y	0.30	153.55	2.27		95.0		
		Z	0.01	126.20	0.15		95.0		
0355	Pulse Waveform (200Hz, 60%)	X	3.80	159.60	12.65	2.22	120.0	±1.6%	±9.6%
	New Transmer (n100, 35-3)	Y	6.60	160.00	16.65		120.0		
		Z	4.46	159.86	14.10		120.0		
0387	QPSK Waveform, 1 MHz	X	0.68	65.45	13.04	1.00	150.0	±4.7%	±9.6%
		Y	0.73	65.95	13.48		150.0		
	and the local designed in the	Z	0.69	65.61	13.17		150.0		
0388	QPSK Waveform, 10 MHz	X	1.43	66.24	14.47	0.00	150.0	±1.2%	±9.6%
		Y	1.49	66.50	14.55		150.0		
		Z	1.45	66.34	14.46		150.0		
0396	64-QAM Waveform, 100 kHz	X	1.65	64.45	16.28	3.01	150.0	±1.9%	±9.6%
		Y	1.76	65.36	17.81		150.0		121.04
		Z	1.70	65.16	17.57		150.0	_	
0399	64-QAM Waveform, 40 MHz	X	2.99	66.76	15.50	0.00	150.0	±2.4%	±9.6%
	the second se	Y	2.93	66.35	15.27		150.0		
	and the second	Z	2.89	66.17	15.23		150.0	1	
10414	WLAN CCDF, 64-QAM, 40 MHz	X	4.07	66.24	15.63	0.00	150.0	±4.2%	±9.6%
	Construction of Alling as a first	Y	3.97	65.87	15.40		150.0	1000	
		Z	4.10	66.47	15.74		150.0		

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

A The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6). B Linearization parameter uncertainty for maximum specified field strength. E Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

Certificate No: EX-7686 Sep22

Page 3 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488



# Report No: TESA2212000576E5 Page: 9 of 27

#### EX3DV4 - SN:7686

September 27, 2022

#### Parameters of Probe: EX3DV4 - SN:7686

#### Sensor Model Parameters

	C1 fF	C2 fF	ν <sup>α</sup> V <sup>-1</sup>	T1 ms V <sup>-2</sup>	T2 msV <sup>-1</sup>	T3 ms	T4 V <sup>-2</sup>	T5 V <sup>-1</sup>	T6
x	12.4	92.42	35.38	4.64	0.00	4.92	0.28	0.02	1.00
у	11.8	87.33	34.80	2.43	0.00	4.90	0.00	0.00	1.02
z	11.8	88.53	35.82	2.72	0.00	4.93	0.00	0.00	1.01

#### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle	125.6°
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

Note: Measurement distance from surface can be increased to 3-4 mm for an Area Scan job.

Certificate No: EX-7686 Sep22

Page 4 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents subject to Terms and Conditions for Electronic Documents at <u>http://www.sgs.com.tw/Terms-and-Conditions</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

f (886-2) 2298-0488

www.sgs.com.tw



### Report No: TESA2212000576E5 Page: 10 of 27

#### EX3DV4 - SN:7686

#### September 27, 2022

### Parameters of Probe: EX3DV4 - SN:7686

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity <sup>F</sup> (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k = 2)
750	41.9	0.89	10.65	10.65	10.65	0.43	0.98	±12.0%
835	41.5	0.90	10.37	10.37	10.37	0.34	1.04	±12.0%
900	41.5	0.97	10.10	10.10	10.10	0.32	1.04	±12.0%
1450	40.5	1.20	9.42	9.42	9.42	0.39	0.80	±12.0%
1750	40.1	1.37	9.19	9.19	9.19	0.38	0.86	±12.0%
1900	40.0	1.40	8.80	8.80	8.80	0.36	0.86	±12.0%
2000	40.0	1.40	8.74	8.74	8.74	0.31	0.86	±12.0%
2300	39.5	1.67	8.54	8.54	8.54	0.39	0.90	±12.0%
2450	39.2	1.80	8.28	8.28	8.28	0.43	0.90	±12.0%
2600	39.0	1.96	7.98	7.98	7.98	0.43	0.90	±12.0%
3300	38.2	2.71	7.47	7.47	7.47	0.30	1.35	±13,1%
3500	37.9	2.91	7.40	7.40	7.40	0.30	1.35	±13.1%
3700	37.7	3.12	7.30	7.30	7.30	0.30	1.35	±13.1%
3900	37.5	3.32	6.94	6.94	6.94	0.40	1.60	±13.1%
4100	37.2	3.53	6.80	6.80	6.80	0.40	1.60	±13.1%
4200	37.1	3.63	6.48	6.48	6.48	0.40	1.70	±13.1%
4400	36.9	3.84	6.42	6.42	6.42	0.40	1.70	±13.1%
4600	36.7	4.04	6.41	6.41	6.41	0.40	1.70	±13.1%
4800	36.4	4.25	6.35	6.35	6.35	0.40	1.80	±13.1%
4950	36.3	4.40	6.32	6.32	6.32	0.40	1.80	±13.1%
5250	35.9	4.71	5.84	5.84	5.84	0.40	1.80	±13.1%
5600	35.5	5.07	5.19	5.19	5.19	0.40	1.80	±13.1%
5750	35.4	5.22	5.33	5.33	5.33	0.40	1.80	±13.1%

<sup>C</sup> Frequency validity above 300 MHz of ±100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ±50 MHz. The uncertainty is the RS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ±10, 25, 40, 50 and 70 MHz for Sort Above 50 KHz is ±10, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4–9 MHz, and ConvF assessed at 6 MHz is 4–9 MHz. Above 50 KHz requency solid convert and event to ±10 MHz. The validity of tissue parameters (*a* and *a*) can be relaxed to ±10 WHz. The uncertainty is the RSS of the ConvF uncertainty is the RSS of the ConvF assessed at 5 MHz is 4–9 MHz, and ConvF average to ±10 MHz. The validity of tissue parameters (*a* and *a*) can be relaxed to ±10 WHz. The uncertainty is the RSS of the ConvF uncertainty for indicated target fissue parameters.

indicator target issue parameters. G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz and below ±2% for frequencies between 3–6 GHz at any distance larger than hall the probe tip diameter from the boundary.

Certificate No: EX-7686\_Sep22

Page 5 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488



# Report No: TESA2212000576E5 Page: 11 of 27

EX3DV4 - SN:7686

September 27, 2022

#### Parameters of Probe: EX3DV4 - SN:7686

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity <sup>F</sup> (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k = 2)
6500	34.5	6.07	6.25	6.25	6.25	0.20	2.50	±18.6%
7000	33.9	6.65	6.17	6.17	6.17	0.25	2.50	±18.6%

<sup>C</sup> Frequency validity at 6.5 GHz is -600/+700 MHz, and ±700 MHz at or above 7 GHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.
<sup>F</sup> At frequencies 6-10 GHz, the validity of tissue parameters (*c* and *o*) can be relaxed to ±10% if liquid compensation formula is applied to measured SAR values. The uncertainty is the RSS of the ConvF uncertainty is the RSS of the ConvF uncertainty is a splited to measured SAR values. The uncertainty is the RSS of the ConvF uncertainty uncertainty is the RSS of the ConvF uncertainty uncertainty is the RSS of the ConvF uncertainty un

than ±1% for frequencies below 3 GHz; below ±2% for frequencies between 3–6 GHz; and below ±4% for frequencies between 6–10 GHz at any distance larger than half the probe tip diameter from the boundary.

Certificate No: EX-7686\_Sep22

Page 6 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

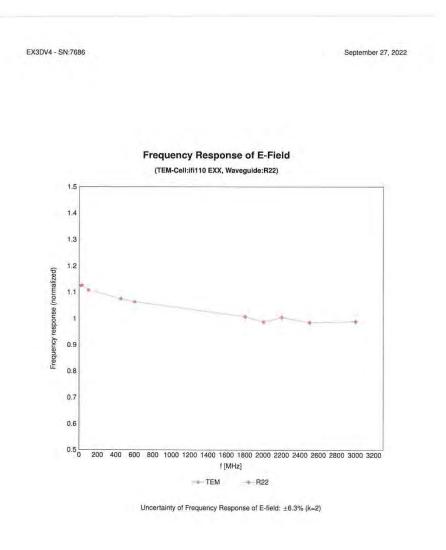
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488



Report No: TESA2212000576E5 Page: 12 of 27



Certificate No: EX-7686\_Sep22

Page 7 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

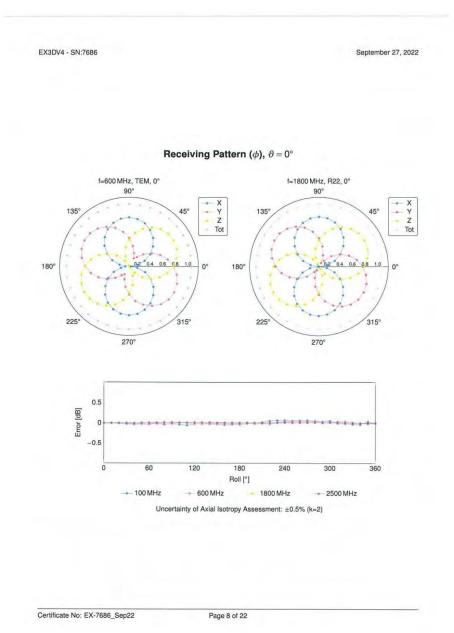
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents subject to Terms and Conditions for Electronic Documents at <u>http://www.sgs.com.tw/Terms-and-Conditions</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488



Report No: TESA2212000576E5 Page: 13 of 27



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

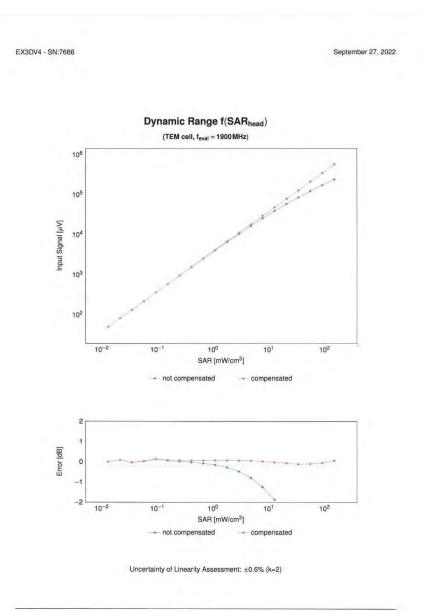
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488

```
www.sgs.com.tw
```



# Report No: TESA2212000576E5 Page: 14 of 27



Certificate No: EX-7686\_Sep22

Page 9 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents subject to Terms and Conditions for Electronic Documents at <u>http://www.sgs.com.tw/Terms-and-Conditions</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

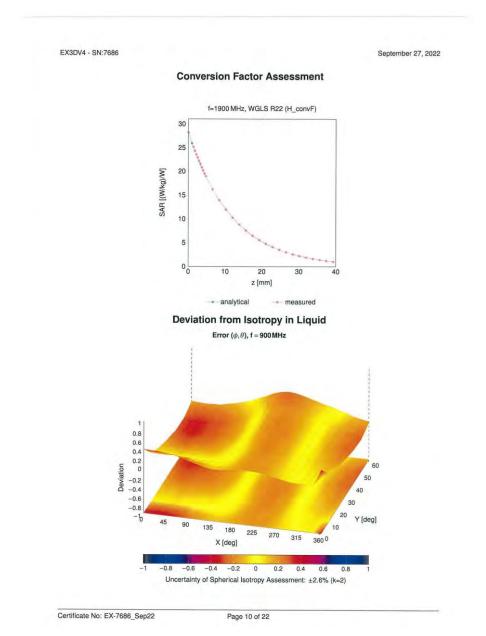
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488

```
www.sgs.com.tw
```



# Report No: TESA2212000576E5 Page: 15 of 27



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488

```
www.sgs.com.tw
```



# Report No: TESA2212000576E5 Page: 16 of 27

#### EX3DV4 - SN:7686

September 27, 2022

### Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	$Unc^E k = 2$
0	0.47	CW	CW	0.00	±4.7
10010	CAA	SAR Validation (Square, 100 ms, 10 ms)	Test	10.00	±9.6
10011	CAB	UMTS-FDD (WCDMA)	WCDMA	2.91	±9.6
10012	CAB	IEEE 802.11b WIFI 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	±9.6
10013	DAC	IEEE 802.11g WiFI 2.4 GHz (DSSS-OFDM, 6 Mbps) GSM-FDD (TDMA, GMSK)	WLAN	9.46	±9.6
10021	DAC	GPRS-FDD (TDMA, GMSK) GPRS-FDD (TDMA, GMSK, TN 0)	GSM GSM	9.39	±9.6
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	±9.6 ±9.6
10025	DAC	EDGE-FDD (TDMA, BPSK, TN 0)	GSM	12.62	±9.6
10026	DAC	EDGE-FDD (TDMA, BPSK, TN 0-1)	GSM	9.55	±9.6
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	±9.6
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	±9.6
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	±9.6
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	±9.6
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	±9.6
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	±9.6
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	±9.6
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	±9.6
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	±9.6
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	±9.6
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	±9.6
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	±9.6
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	±9.6
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	±9.6
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	±9.6
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	±9.6
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	±9.6
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	±9.6
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	±9.6
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	±9.6
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	±9.6
10061	CAB	IEEE 802.11b WIFI 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	±9.6
10062	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	±9.6
10063	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	±9.6
10065	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps) IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.09	±9.6
10066	CAD	IEEE 802.11a/h WiFI 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	±9.6
10067	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	9.38	±9.6 ±9.6
10068	CAD	IEEE 802.11a/h WIFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.12	
10069	CAD	IEEE 802.11a/h WIFI 5 GHz (OFDM, 54 Mbps)	WLAN	10.24	±9.6
10071	CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	±9.6
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	±9.6
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	±9.6
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	±9.6
10075	CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	±9.6
10076	CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	±9.6
10077	CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	±9.6
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	±9.6
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	±9.6
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	±9.6
10097	CAC	UMTS-FDD (HSDPA)	WCDMA	3.98	±9.6
10098	DAC	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	±9.6
10099	CAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	±9.6
10100	CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FOD	5.67	±9.6
10101	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
10102	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10103	DAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	±9.6
10104	CAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	±9.6
10105	CAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	±9.6
10108	CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	±9.6
10109	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	±9.6
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	±9.6

Certificate No: EX-7686\_Sep22

Page 11 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留的天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents subject to Terms and Conditions for Electronic Documents at <u>http://www.sgs.com.tw/Terms-and-Conditions</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488

www.sgs.com.tw



# Report No: TESA2212000576E5 Page: 17 of 27

EX3DV4 - SN:7686

September 27, 2022

UID	Rev	Communication System Name	Group	PAR (dB)	Unc <sup>E</sup> k =:
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	±9.6
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	±9.6
10114	CAG	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	±9.6
10115	CAG	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	±9.6
10116	CAG	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	±9.6
10117	CAG	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	±9.6
10118	CAD	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	±9.6
10119	CAD	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	±9.6
10140	CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	±9.6
10141	CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	±9.6
10142	CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
10143	CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	±9.6
10144	CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	±9.6
10145	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	±9.6
10146	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	19.6
10147	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	±9.6
10149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10151	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	±9,6
10152	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	±9.6
10153	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	±9.6
10154	CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	±9.6
10155	CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10156	CAF	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	±9.6
10157	CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	±9.6
10158	CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	±9.6
10159	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	±9.6
10160	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	±9.6
10161	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10162	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	±9.6
10166	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	±9.6
10167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	±9.6
10168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	±9.6
10169	CAG	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	±9.6
10170	CAG	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10171	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	±9.6
10172	CAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	±9.6
10173	CAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10174	CAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10175	CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	±9.6
10176	CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10177	CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	±9.6
10178	CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10179	AAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10181	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	±9.6
10182	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10183	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10184	CAG	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
10185	CAI	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	±9.6
10186	CAG	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	±9.6
10188	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10189	CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10193	CAE	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	±9.6
10194	AAD	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	±9.6
10195	CAE	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	±9.6
10196	CAE	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	±9.6
10197	AAE	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	±9.6
10198	CAF	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	±9.6
10219	CAF	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	±9.6
10220	AAF	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	±9.6
10221	CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	±9.6
10222	CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	±9.6
10223	CAD	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	±9.6
10224	CAD	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN		10.010

Certificate No: EX-7686\_Sep22

Page 12 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Unless other was baled une solute of the state and the state report refer only to the sample(s) lessed and state and provide the sample(s) lessed and state prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488



### Report No: TESA2212000576E5 Page: 18 of 27

 4 - SN:7865

 IVD
 Rev
 Communication System Name

 10225
 CAD
 LITE-TDD (SC-FDMA, 1RB, 1.4MHz, 16-QAM)

 10227
 CAD
 LITE-TDD (SC-FDMA, 1RB, 1.4MHz, 16-QAM)

 10228
 CAD
 LITE-TDD (SC-FDMA, 1RB, 1.4MHz, 16-QAM)

 10229
 CAD
 LITE-TDD (SC-FDMA, 1RB, 1.4MHz, 16-QAM)

 10230
 CAD
 LITE-TDD (SC-FDMA, 1RB, 1.4MHz, 16-QAM)

 10231
 CAD
 LITE-TDD (SC-FDMA, 1RB, 1.5MHz, 16-QAM)

 10232
 CAD
 LITE-TDD (SC-FDMA, 1RB, 15MHz, 16-QAM)

 10232
 CAD
 LITE-TDD (SC-FDMA, 1RB, 15MHz, 16-QAM)

 10232
 CAD
 LITE-TDD (SC-FDMA, 1RB, 15MHz, 16-QAM)

 10236
 CAD
 LITE-TDD (SC-FDMA, 1RB, 15MHz, 16-QAM)

 10237
 CAD
 LITE-TDD (SC-FDMA, 1RB, 15MHz, 16-QAM)

 10238
 CAD
 LITE-TDD (SC-FDMA, 50% RB, 1.4MHz, 16-QAM)

 10244
 CAD
 LITE-TDD (SC-FDMA, 50% RB, 1.5MHz, 16-QAM)

 10245
 CAD
 < EX3DV4 - SN:7686 September 27, 2022 PAR (dB) Unc<sup>E</sup> k = 2 Group WCDMA LTE-TDD LTE-TDD 5.97 ±9.6 ±9.6 9.49 10.26 LTE-TDD 9.22 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 ITE-TOD 9 48 LTE-TDD 10.25 9.19 9.48 10.25 9.21 9.48 TE-TO LTE-TDD LTE-TDD LTE-TDD LTE-TDD LTE-TDD LTE-TDD LTE-TDD ±9.6 10.25 ±9.6 9.21 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 LTE-TDD 9.48 10.25 LTE-TDD LTE-TOD 9.21 LTE-TDD LTE-TDD LTE-TDD LTE-TDD LTE-TDD LTE-TDD LTE-TDD LTE-TDD 9.82 9.86 9.46 10.06 10.06 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 9.30 9.91 ±9.6 LTE-TDD 10.09 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 LTE-TDD 9.29 9.81 LTE-TDD ITE-TOD 10 17 LTE-TDD 9.24 0.00 9.90 10.14 9.20 9.96 10.08 ±9.6 ±9.6 9.34 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 9.98 LTE-TDD 9.97 LTE-TDD 9.24 9.83 10.16 9.23 9.92 LTE-TDD LTE-TDD LTE-TDD LTE-TDD ±9.6 ±9.6 ±9.6 ±9.6 LTE-TOD LTE-TOD LTE-TOD LTE-TOD LTE-TOD LTE-TOD 9.92 10.07 9.30 10.06 10.13 ±9.6 ±9.6 9.58 ±9.6 ±9.6 WCDM/ WCDMA 3.96 11.81 PHS 11.81 PHS 12.18 3.91 3.46 PHS CDMA2000 CDMA2000 CDMA2000 CDMA2000 CDMA2000 CDMA2000 LTE-FDD LTE-FDD LTE-FDD 3.46 3.39 3.50 12.49 5.81 6.39 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 LTE-FDD 6.60 WIMAX 12.03 WIMAX 12.52 11.86 15.24 WIMAX WIMAX WIMAS WIMA 14.67

Certificate No: EX-7686 Sep22

Page 13 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction form exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488



# Report No: TESA2212000576E5 Page: 19 of 27

EX3DV4 - SN:7686

September 27, 2022

UID	Rev	Communication System Name	Group	PAR (dB)	$Unc^E k = 2$
10307	AAB	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, QPSK, PUSC)	WIMAX	14.49	±9.6
10308	AAB	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 16QAM, PUSC)	WIMAX	14.46	±9.6
10309	AAB	IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, 16QAM, AMC 2x3)	WiMAX	14.58	±9.6
10310	AAB	IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, QPSK, AMC 2x3	WIMAX	14.57	±9.6
10311	AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	±9.6
10313	AAD	IDEN 1:3	IDEN	10.51	±9.6
10314	AAD	IDEN 1:6	IDEN	13.48	±9.6
10315	AAD	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc dc)	WLAN	1.71	±9.6
10316	AAD	IEEE 802.11g WIFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	±9.6
10317	AAA	IEEE 802.11a WIFI 5 GHz (OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	±9.6
10352	AAA	Pulse Wavelorm (200 Hz, 10%)	Generic	10.00	±9.6
10353	AAA	Pulse Waveform (200 Hz, 20%)	Generic	6.99	±9.6
10354	AAA	Pulse Waveform (200 Hz, 40%)	Generic	3.98	±9.6
10355	AAA	Pulse Waveform (200 Hz, 60%)	Generic	2.22	±9.6
10356	AAA	Pulse Waveform (200 Hz, 80%)	Generic	0.97	±9.6
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	±9.6
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	±9.6
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	±9.6
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	±9.6
10400	AAD	IEEE 802.11ac WiFi (20 MHz, 64-QAM, 99pc dc)	WLAN	8.37	±9.6
10401	AAA	IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99pc dc)	WLAN	8.60	±9.6
10402	AAA	IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc dc)	WLAN	8.53	±9.6
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	±9.6
10404	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	±9.6
10406	AAD	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	±9.6
10410	AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10414	AAA	WLAN CCDF, 64-QAM, 40 MHz	Generic	8.54	±9.6
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc dc)	WLAN	1.54	±9.6
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc dc)	WLAN	8.23	±9.6
10417	AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc dc)	WLAN	8.23	±9.6
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Long)	WLAN	8.14	±9.6
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Short)	WLAN	8.19	±9.6
10422	AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	±9.6
10423	AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	±9.6
10424	AAE	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	±9.6
10425	AAE	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	±9.6
10426	AAE	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	±9.6
10427	AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	±9.6
10430	AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	±9.6
10431	AAC	LTE-FDD (OFDMA, 10 MHz, E-TM 3,1)	LTE-FDD	8.38	±9.6
10432	AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
10433	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
10434	AAG	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	±9.6
10435	AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub)	LTE-TDD	7.82	±9.6
10447	AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	±9.6
10448	AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3,1, Clippin 44%)	LTE-FDD	7.53	±9.6
10449	AAC	LTE-FDD (OFDMA, 15 MHz, E TM 3.1, Cliping 44%)	LTE-FDD	7.51	±9.6
10450	AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	±9.6
10451	AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	±9.6
10453	AAC	Validation (Square, 10 ms, 1 ms)	Test	10.00	±9.6
10456	AAC	IEEE 802.11ac WiFi (160 MHz, 64-QAM, 99pc dc)	WLAN	8.63	±9.6
10457	AAG	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	±9.6
10458	AAG	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	±9.6
10459	AAC	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	±9.6
10460	AAC	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	±9.6
10461	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.82	±9.6
10462	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.30	±9.6
10463	AAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.56	±9.6
10464	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.82	±9.6
10465	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	±9.6
10466	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Sub)	LTE-TOD	8.52	±9.6
	AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub)	LTE-TOD	7.82	±9.6 ±9.6
10467		LTE-TDD (SC-FDMA, 1 RB, 5MHz, 0FSK, 0L SUB)	LTE-TOD	8.32	±9.6
10467			1 111-100	0.32	±3.0
10468	AAF	TTE-TOD (SC-EDMA 1 BB 5 MHz 64-OAM UL SUN)	ITE-TOD	9.50	+0.0
	AAP AAD AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Sub) LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub)	LTE-TDD LTE-TDD	8.56	±9.6 ±9.6

Certificate No: EX-7686 Sep22

Page 14 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents subject to Terms and Conditions for Electronic Documents at <u>http://www.sgs.com.tw/Terms-and-Conditions</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488



# Report No: TESA2212000576E5 Page: 20 of 27

EX3DV4 - SN:7686

September 27, 2022

UID	Rev	Communication System Name	Group	PAR (dB)	Unc <sup>E</sup> k = 2
10472	AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	±9.6
10473	AAA	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.82	±9.6
10474	AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	±9.6
10475	AAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	±9.6
10477	AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Sub)	LTE-TDD	8.32	±9.6
10478	AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Sub)	LTE-TDD	8.57	±9.6
10479	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.74	±9.6
10480	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.18	±9.6
10481	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.45	±9.6
10482	AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.71	+9.6
10483	AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, Sub)	LTE-TDD	8.39	±9.6
10484	AAB	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 64-QAM, UL Sub)	LTE-TDD	8.47	±9.6
10485	AAB	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 04-QAM, 02 300)	LTE-TDD	7.59	±9.6
10486	AAB	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 16-QAM, UL Sub)	LTE-TDD	8.38	±9.6
10488	AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 10-QAM, 0L Sub)	LTE-TDD	8.60	±9.6
	AAC			7.70	
10488	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	8.31	±9.6 ±9.6
		LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Sub)			
10490	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.54	±9.6
10491	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Sub)	LTE-TDD	7.74	±9.6
10492	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.41	±9.6
10493	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.55	±9.6
10494	AAF	LTE-TDD (SC-FDMA, 50% R8, 20 MHz, QPSK, UL Sub)	LTE-TDD	7.74	±9.6
10495	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Sub)	LTE-TDD	8.37	±9.6
10496	AAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Sub)	LTE-TDD	8.54	±9.6
10497	AAE	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Sub)	LTE-TDD	7.67	±9.6
10498	AAE	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Sub)	LTE-TDD	8.40	±9.6
10499	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Sub)	LTE-TDD	8.68	±9.6
10500	AAF	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Sub)	LTE-TDD	7.67	±9.6
10501	AAF	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Sub)	LTE-TDD	8.44	±9.6
10502	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Sub)	LTE-TDD	8.52	±9.6
10503	AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Sub)	LTE-TDD	7.72	±9.6
10504	AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Sub)	LTE-TDD	8.31	±9.6
10505	AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Sub)	LTE-TDD	8.54	±9.6
10506	AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Sub)	LTE-TDD	7.74	±9.6
10507	AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Sub)	LTE-TDD	8.36	±9.6
10508	AAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Sub)	LTE-TDD	8.55	±9.6
10509	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Sub)	LTE-TOD	7.99	±9.6
10510	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Sub)	LTE-TDD	8.49	±9.6
10511	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Sub)	LTE-TDD	8.51	±9.6
10512	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Sub)	LTE-TDD	7.74	±9.6
10513	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, GF SR, 0E Sub)	LTE-TDD	8.42	±9.6
10514	AAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-GAM, UL Sub)	LTE-TDD	8.45	±9.6
10515	AAE	IEEE 802.11b WIFI 2.4 GHz (DSSS, 2 Mbps, 99pc dc)	WLAN	1.58	±9.6
10516	AAE				
		IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc dc)	WLAN	1.57	±9.6
10517	AAF	IEEE 802.11b WIFI 2.4 GHz (DSSS, 11 Mbps, 99pc dc)	WLAN	1.58	±9.6
10518	AAF	IEEE 802.11 a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc dc)	WLAN	8.23	±9.6
10519	AAF	IEEE 802.11a/h WIFi 5 GHz (OFDM, 12 Mbps, 99pc dc)	WLAN	8.39	±9.6
10520	AAB	IEEE 802.11a/h WIFI 5 GHz (OFDM, 18 Mbps, 99pc dc)	WLAN	8.12	±9.6
10521	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc dc)	WLAN	7.97	±9.6
10522	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc dc)	WLAN	8.45	±9.6
10523	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc dc)	WLAN	8.08	±9.6
10524	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc dc)	WLAN	8.27	±9.6
10525	AAC	IEEE 802.11ac WiFi (20 MHz, MGS0, 99pc dc)	WLAN	8.36	±9.6
10526	AAF	IEEE 802.11ac WiFi (20 MHz, MCS1, 99pc dc)	WLAN	8.42	±9.6
10527	AAF	IEEE 802.11ac WiFi (20 MHz, MCS2, 99pc dc)	WLAN	8.21	±9.6
10528	AAF	IEEE 802.11ac WiFi (20 MHz, MCS3, 99pc dc)	WLAN	8.36	±9.6
10529	AAF	IEEE 802.11ac WiFi (20 MHz, MCS4, 99pc dc)	WLAN	8.36	±9.6
10531	AAF	IEEE 802.11ac WiFi (20 MHz, MCS6, 99pc dc)	WLAN	8.43	±9.6
10532	AAF	IEEE 802.11ac WIFI (20 MHz, MCS7, 99pc dc)	WLAN	8.29	±9.6
10533	AAE	IEEE 802.11ac WIFi (20 MHz, MCS8, 99pc dc)	WLAN	8.38	±9.6
10534	AAE	IEEE 802.11ac WiFi (40 MHz, MCS0, 99pc dc)	WLAN	8.45	±9.6
10535	AAE	IEEE 802.11ac WiFi (40 MHz, MCS1, 99pc dc)	WLAN	8.45	±9.6
10536	AAF	IEEE 802.11ac WiFI (40 MHz, MCS2, 99pc dc)	WLAN	8.32	±9.6
10537	AAF	IEEE 802.11ac WiFi (40 MHz, MCS3, 99pc dc)	WLAN	8.44	±9.6
10538	AAF	IEEE 802.11ac WiFi (40 MHz, MCS4, 99pc dc)	WLAN	8.54	±9.6
	AAA	IEEE 802.11ac WIFI (40 MHz, MCS4, 99pc dc)	WLAN	8.39	±9.6

Certificate No: EX-7686 Sep22

Page 15 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents subject to Terms and Conditions for Electronic Documents at <u>http://www.sgs.com.tw/Terms-and-Conditions</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488

www.sgs.com.tw



September 27, 2022

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10541	AAA	IEEE 802.11ac WiFI (40 MHz, MCS7, 99pc dc)	WLAN	8.46	±9.6
10542	AAA	IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc dc)	WLAN	8.65	±9.6
10543	AAC	IEEE 802.11ac WiFi (40 MHz, MCS9, 99pc dc)	WLAN	8.65	±9.6
10544	AAC	IEEE 802.11ac WIFI (80 MHz, MCS0, 99pc dc)	WLAN	8.47	±9.6
10545	AAC	IEEE 802.11ac WiFi (80 MHz, MCS1, 99pc dc)	WLAN	8.55	±9.6
10546	AAC	IEEE 802.11ac WIFI (80 MHz, MCS2, 99pc dc)	WLAN	8.35	±9.6
10547	AAC	IEEE 802.11ac WiFI (80 MHz, MCS3, 99pc dc)	WLAN	8.49	±9.6
10548	AAC	IEEE 802.11ac WiFi (80 MHz, MCS4, 99pc dc)	WLAN	8.37	±9.6
10550	AAC	IEEE 802.11ac WiFi (80 MHz, MCS6, 99pc dc)	WLAN	8.38	±9.6
10551	AAC	IEEE 802.11ac WiFi (80 MHz, MCS7, 99pc dc)	WLAN	8.50	±9.6
10552	AAC	IEEE 802.11ac WiFI (80 MHz, MCS8, 99pc dc)	WLAN	8.42	±9.6
10553	AAC	IEEE 802.11ac WiFi (80 MHz, MCS9, 99pc dc)	WLAN	8.45	±9.6
10554	AAC	IEEE 802.11ac WIFI (160 MHz, MCS0, 99pc dc)	WLAN	8.48	±9.6
10555	AAC	IEEE 802.11ac WIFI (160 MHz, MCS1, 99pc dc)	WLAN	8.47	±9.6
10556	AAC	IEEE 802.11ac WIFI (160 MHz, MCS2, 99pc dc)	WLAN	8.50	±9.6
10557	AAC	IEEE 802.11ac WiFi (160 MHz, MCS3, 99pc dc)	WLAN	8.52	+9.6
10558	AAC	IEEE 802.11ac WIFI (160 MHz, MCS4, 99pc dc)	WLAN	8.61	±9.6
10560	AAC	IEEE 802.11ac WiFi (160 MHz, MCS6, 99pc dc)	WLAN	8.73	±9.6
10561	AAC	IEEE 802.11ac WiFi (160 MHz, MCS7, 99pc dc)	WLAN	8.56	±9.6
10562	AAC	IEEE 802.11ac WIFI (160 MHz, MCS7, 99pc dc)	WLAN		
10563	AAC	IEEE 802.11ac WiFi (160 MHz, MCS9, 99pc dc)	WLAN	8.69	±9.6
10564	AAC	IEEE 802.11ac WIFI (160 MHz, MCS9, 99pc dc) IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc dc)		8.77	±9.6
10565	AAC		WLAN	8.25	±9.6
10565	AAC	IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc dc) IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc dc)	WLAN	8.45	±9.6
10567	AAC			8.13	±9.6
10568	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc dc)	WLAN	8.00	±9.6
		IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc dc)	WLAN	8.37	±9.6
10569	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc dc)	WLAN	8.10	±9.6
10570	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc dc)	WLAN	8.30	±9.6
10571	AAC	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc dc)	WLAN	1.99	±9.6
10572	AAC	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc dc)	WLAN	1.99	±9.6
10573	AAC	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc dc)	WLAN	1.98	±9.6
10574	AAC	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc dc)	WLAN	1.98	±9.6
10575	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc dc)	WLAN	8.59	±9.6
10576	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc dc)	WLAN	8.60	±9.6
10577	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc dc)	WLAN	8.70	±9.6
10578	AAD	IEEE 802.11g WIFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc dc)	WLAN	8.49	±9.6
10579	AAD	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc dc)	WLAN	8.36	±9.6
10580	AAD	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc dc)	WLAN	8.76	±9.6
10581	AAD	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc dc)	WLAN	8.35	±9.6
10582	AAD	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc dc)	WLAN	8.67	±9.6
10583	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc dc)	WLAN	8,59	±9.6
10584	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc dc)	WLAN	8.60	±9.6
10585	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc dc)	WLAN	8.70	±9.6
10586	AAD	IEEE 802.11a/h WIFI 5 GHz (OFDM, 18 Mbps, 90pc dc)	WLAN	8.49	±9.6
10587	AAA	IEEE 802.11a/h WIFI 5 GHz (OFDM, 24 Mbps, 90pc dc)	WLAN	B.36	±9.6
10588	AAA	IEEE 802.11a/h WIFI 5 GHz (OFDM, 36 Mbps, 90pc dc)	WLAN	8.76	±9.6
10589	AAA	IEEE 802 11a/h WIFI 5 GHz (OFDM, 48 Mbps, 90pc dc)	WLAN	8.35	±9.6
10590	AAA	IEEE 802.11a/h WIFI 5 GHz (OFDM, 54 Mbps, 90pc dc)	WLAN	8.67	±9.6
10591	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc dc)	WLAN	8.63	±9.6
10592	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 90pc dc)	WLAN	8.79	±9.6
10593	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS2, 90pc dc)	WLAN	8,64	±9.6
10594	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc dc)	WLAN	8.74	±9.6
10595	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 90pc dc)	WLAN	8.74	±9.6
10596	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc dc)	WLAN	8.71	±9.6
10597	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 90pc dc)	WLAN	8.72	±9.6
10598	AAA	IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc dc)	WLAN	8.50	±9.6
10599	AAA	IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc dc)	WLAN	8.79	±9.6
10600	AAA	IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc dc)	WLAN	8.88	±9.6
10601	AAA	IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc dc)	WLAN	8.82	±9.6
10602	AAA	IEEE 802.11n (HT Mixed, 40 MHz, MCS3, 90pc dc)	WLAN	8.94	±9.6
10603	AAA	IEEE 802.11n (HT Mixed, 40 MHz, MCS4, 90pc dc)	WLAN	9.03	±9.6
10604	AAA	IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc dc)	WLAN	8.76	±9.6
10605	AAA	IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc dc)	WLAN	8.97	±9.6
10606	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS7, 90pc dc)	WLAN	8.82	±9.6
10607	AAC	IEEE 802.11ac WiFi (20 MHz, MCS0, 90pc dc)	WLAN	8.64	±9.6
10608	AAC	IEEE 802.11ac WiFi (20 MHz, MCS1, 90pc dc)	WLAN	8.77	±9.6

Certificate No: EX-7686\_Sep22

Page 16 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents subject to Terms and Conditions for Electronic Documents at <u>http://www.sgs.com.tw/Terms-and-Conditions</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488



September 27, 2022

UID	Rev	Communication System Name	Group	PAR (dB)	Unc <sup>E</sup> k = 1
10609	AAC	IEEE 802.11ac WiFi (20 MHz, MCS2, 90pc dc)	WLAN	8.57	±9.6
10610	AAC	IEEE 802.11ac WiFi (20 MHz, MCS3, 90pc dc)	WLAN	8.78	±9.6
10611	AAC	IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc dc)	WLAN	8.70	±9.6
10612	AAC	IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc dc)	WLAN	8.77	±9.6
10613	AAG	IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc dc)	WLAN	8.94	±9.6
10614	AAC	IEEE 802.11ac WiFi (20 MHz, MCS7, 90pc dc)	WLAN	8.59	±9.6
10615	AAC	IEEE 802.11ac WiFi (20 MHz, MCS8, 90pc dc)	WLAN	8.82	±9.6
10616	AAC	IEEE 802.11ac WiFi (40 MHz, MCS0, 90pc dc)	WLAN	8.82	±9.6
10617	AAC	IEEE 802.11ac WiFi (40 MHz, MCS1, 90pc dc)	WLAN	8.81	±9.6
10618	AAC	IEEE 802.11ac WiFI (40 MHz, MCS2, 90pc dc)	WLAN	8.58	±9.6
10619	AAC	IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc dc)	WLAN	8.86	±9.6
10620	AAC	IEEE 802.11ac WIFi (40 MHz, MCS4, 90pc dc)	WLAN	8.87	±9.6
10621	AAC	IEEE 802.11ac WiFi (40 MHz, MCS5, 90pc dc)	WLAN	8.77	±9.6
10622	AAC	IEEE 802.11ac WiFi (40 MHz, MCS6, 90pc dc)	WLAN	8.68	±9.6
10623	AAC	IEEE 802.11ac WIFI (40 MHz, MCS7, 90pc dc)	WLAN	8.82	±9.6
10624	AAC	IEEE 802.11ac WiFi (40 MHz, MCS8, 90pc dc)	WLAN	B.96	±9.6
10625	AAC	IEEE 802.11ac WIFI (40 MHz, MCS9, 90pc dc)	WLAN	8.96	±9.6
10626	AAC	IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc dc)	WLAN	8.83	±9.6
10627	AAC	IEEE 802.11ac WiFi (80 MHz, MCS1, 90pc dc)	WLAN	8.88	±9.6
10628	AAC	IEEE 802.11ac WIFI (80 MHz, MCS2, 90pc dc)	WLAN	8.71	±9.6
10629	AAC	IEEE 802.11ac WIFI (80 MHz, MCS3, 90pc dc)	WLAN	8.85	±9.6
10630	AAC	IEEE 802.11ac WiFI (80 MHz, MCS4, 90pc dc)	WLAN	8.72	±9.6
10631	AAC	IEEE 802.11ac WIFI (80 MHz, MCS5, 90pc dc)	WLAN	8.81	±9.6
10632	AAC	IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc dc)	WLAN	8.74	±9.6
10633	AAG	IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc dc)	WLAN	8.83	±9.6
10634	AAC	IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc dc)	WLAN	8.80	±9.6
10635	AAC	IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc dc)	WLAN	8.81	±9.6
10636	AAC	IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc dc)	WLAN	8.83	±9.6
10637	AAC	IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc dc)	WLAN	8.79	±9.6
10638	AAC	IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc dc)	WLAN	8.86	±9.6
10639	AAC	IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc dc)	WLAN	8.85	
10640	AAC	IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc dc)	WLAN	8.98	±9.6 ±9.6
10641	AAC	IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc dc)	WLAN	9.06	
10642	AAC				±9.6
10643	AAC	IEEE 802.11ac WiFi (160 MHz, MCS6, 90pc dc)	WLAN	9.06	±9.6
10643	AAC	IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc dc)	WLAN	8.89	±9.6
		IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc dc)	WLAN	9.05	±9.6
10645	AAC	IEEE 802.11ac WIFI (160 MHz, MCS9, 90pc dc)	WLAN	9.11	±9.6
10646	AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub=2,7)	LTE-TDD	11.96	±9.6
	AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub=2,7)	LTE-TDD	11.96	±9.6
10648	AAC	CDMA2000 (1x Advanced)	CDMA2000	3.45	±9.6
10652	AAC	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	±9.6
10653	AAC	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	±9.6
10654	AAC	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	±9.6
10655	AAC	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	±9.6
10658	AAC	Pulse Waveform (200 Hz, 10%)	Test	10.00	±9.6
10659	AAC	Pulse Waveform (200 Hz, 20%)	Test	6.99	±9.6
10660	AAC	Pulse Waveform (200 Hz, 40%)	Test	3.98	±9.6
10661	AAC	Pulse Waveform (200 Hz, 60%)	Test	2.22	±9.6
10662	AAC	Pulse Waveform (200 Hz, 80%)	Test	0.97	±9.6
10670	AAC	Bluetooth Low Energy	Bluetooth	2.19	±9.6
10671	AAD	IEEE 802.11ax (20 MHz, MCS0, 90pc dc)	WLAN	9.09	±9.6
10672	AAD	IEEE 802.11ax (20 MHz, MCS1, 90pc dc)	WLAN	8.57	±9.6
10673	AAD	IEEE 802.11ax (20 MHz, MCS2, 90pc dc)	WLAN	8.78	±9.6
10674	AAD	IEEE 802.11ax (20 MHz, MCS3, 90pc dc)	WLAN	8.74	±9.6
10675	AAD	IEEE 802.11ax (20 MHz, MCS4, 90pc dc)	WLAN	8.90	±9.6
10676	AAD	IEEE 802.11ax (20 MHz, MCS5, 90pc dc)	WLAN	8.77	±9.6
10677	AAD	IEEE 802.11ax (20 MHz, MCS6, 90pc dc)	WLAN	8.73	±9.6
10678	AAD	IEEE 802.11ax (20 MHz, MCS7, 90pc dc)	WLAN	8.78	±9.6
10679	AAD	IEEE 802.11ax (20 MHz, MCS8, 90pc dc)	WLAN	8.89	±9.6
10680	AAD	IEEE 802.11ax (20 MHz, MCS9, 90pc dc)	WLAN	8.80	±9.6
10681	AAG	IEEE 802,11ax (20 MHz, MCS10, 90pc dc)	WLAN	8.62	±9.6
10682	AAF	IEEE 802.11ax (20 MHz, MCS11, 90pc dc)	WLAN	8.83	±9.6
10683	AAA	IEEE 802.11ax (20 MHz, MCS0, 99pc dc)	WLAN	8.42	±9.6
10684	AAC	IEEE 802.11ax (20 MHz, MCS1, 99pc dc)	WLAN	8.26	±9.6
10685	AAC	IEEE 802.11ax (20 MHz, MCS2, 99pc dc)	WLAN	8.33	±9.6

Certificate No: EX-7686\_Sep22

Page 17 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents subject to Terms and Conditions for Electronic Documents at <u>http://www.sgs.com.tw/Terms-and-Conditions</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488

www.sgs.com.tw



September 27, 2022

UID	Rev	Communication System Name	Group	PAR (dB)	Unc <sup>E</sup> k = 2
10687	AAE	IEEE 802.11ax (20 MHz, MCS4, 99pc dc)	WLAN	8.45	±9.6
10688	AAE	IEEE 802.11ax (20 MHz, MGS5, 99pc dc)	WLAN	8.29	±9,6
10689	AAD	IEEE 802.11ax (20 MHz, MCS6, 99pc dc)	WLAN	8.55	±9.6
10690	AAE	IEEE 802.11ax (20 MHz, MCS7, 99pc dc)	WLAN	8.29	±9.6
10691	AAB	IEEE 802.11ax (20 MHz, MCS8, 99pc dc)	WLAN	8.25	±9.6
10692	AAA	IEEE 802.11ax (20 MHz, MCS9, 99pc dc)	WLAN	8.29	±9.6
10693	AAA	IEEE 802.11ax (20 MHz, MCS10, 99pc dc)	WLAN	8.25	±9.6
10694	AAA	IEEE 802.11ax (20 MHz, MCS11, 99pc dc)	WLAN	8.57	±9.6
10695	AAA	IEEE 802.11ax (40 MHz, MCS0, 90pc dc)	WLAN	8.78	±9.6
10696	AAA	IEEE 802.11ax (40 MHz, MCS1, 90pc dc)	WLAN	8.91	19.6
10697	AAA	IEEE 802.11ax (40 MHz, MCS2, 90pc dc)	WLAN	8.61	19.6
10698	AAA	IEEE 802.11ax (40 MHz, MCS3, 90pc dc)	WLAN	8.89	±9.6
10699	AAA	IEEE 802.11ax (40 MHz, MCS4, 90pc dc)	WLAN	8.82	±9.6
10700	AAA	IEEE 802.11ax (40 MHz, MCS5, 90pc dc)	WLAN	8.73	±9.6
10701	AAA	IEEE 802.11ax (40 MHz, MCS6, 90pc dc)	WLAN	8.86	±9.6
10702	AAA	IEEE 802.11ax (40 MHz, MCS7, 90pc dc)	WLAN	8.70	±9.6
10703	AAA	IEEE 802.11ax (40 MHz, MCSB, 90pc dc)	WLAN	8.82	±9.6
10704	AAA	IEEE 802.11ax (40 MHz, MCS8, 90pc dc)			
10704	AAA		WLAN	8.56	±9.6
		IEEE 802.11ax (40 MHz, MCS10, 90pc dc)	WLAN	8.69	±9.6
10706	AAC	IEEE 802.11ax (40 MHz, MCS11, 90pc dc)	WLAN	8.66	±9.6
10707		IEEE 802.11ax (40 MHz, MCS0, 99pc dc)	WLAN	8.32	±9.6
10708	AAC	IEEE 802.11ax (40 MHz, MCS1, 99pc dc)	WLAN	8.55	±9.6
10709	AAC	IEEE 802.11ax (40 MHz, MCS2, 99pc dc)	WLAN	8.33	±9.6
10710	AAC	IEEE 802.11ax (40 MHz, MCS3, 99pc dc)	WLAN	8.29	±9.6
10711	AAC	IEEE 802.11ax (40 MHz, MCS4, 99pc dc)	WLAN	8.39	±9.6
10712	AAC	IEEE 802.11ax (40 MHz, MCS5, 99pc dc)	WLAN	8.67	±9.6
10713	AAC	IEEE 802.11ax (40 MHz, MCS6, 99pc dc)	WLAN	8.33	±9.6
10714	AAC	IEEE 802.11ax (40 MHz, MCS7, 99pc dc)	WLAN	8.26	±9.6
10715	AAC	IEEE 802.11ax (40 MHz, MCS8, 99pc dc)	WLAN	8.45	±9.6
10716	AAC	IEEE 802.11ax (40 MHz, MCS9, 99pc dc)	WLAN	8.30	±9.6
10717	AAC	IEEE 802.11ax (40 MHz, MCS10, 99pc dc)	WLAN	8.48	±9.6
10718	AAC	IEEE 802.11ax (40 MHz, MCS11, 99pc dc)	WLAN	8,24	±9.6
10719	AAC	IEEE 802.11ax (80 MHz, MCS0, 90pc dc)	WLAN	8.81	±9.6
10720	AAC	IEEE 802.11ax (80 MHz, MCS1, 90pc dc)	WLAN	8.87	±9.6
10721	AAC	IEEE 802.11ax (80 MHz, MCS2, 90pc dc)	WLAN	8.76	±9.6
10722	AAC	IEEE 802.11ax (80 MHz, MCS3, 90pc dc)	WLAN	8.55	±9.6
10723	AAC	IEEE 802.11ax (80 MHz, MCS4, 90pc dc)	WLAN	8.70	±9.6
10724	AAC	(EEE 802.11ax (80 MHz, MCS5, 90pc dc)	WLAN	8.90	±9.6
10725	AAC	IEEE 802.11ax (80 MHz, MCS6, 90pc dc)	WLAN	8.74	±9.6
10726	AAC	IEEE 802.11ax (80 MHz, MCS7, 90pc dc)	WLAN	8.72	±9.6
10727	AAC	IEEE 802.11ax (80 MHz, MCS7, 90pc dc)	WLAN	8.66	
10728	AAC	IEEE 802.11ax (80 MHz, MCS8, 90pc dc)	WLAN	8.65	±9.6
10729	AAC				±9.6
	AAC	IEEE 802.11ax (80 MHz, MCS10, 90pc dc)	WLAN	8.64	±9.6
10730		IEEE 802.11ax (80 MHz, MCS11, 90pc dc)	WLAN	8.67	±9.6
10731	AAC	IEEE 802.11ax (80 MHz, MCS0, 99pc dc)	WLAN	8.42	±9.6
10732	AAC	IEEE 802.11ax (80 MHz, MCS1, 99pc dc)	WLAN	8.46	±9.6
10733	AAC	IEEE 802.11ax (80 MHz, MCS2, 99pc dc)	WLAN	8.40	±9.6
10734	AAC	IEEE 802,11ax (80 MHz, MCS3, 99pc dc)	WLAN	8.25	±9.6
10735	AAC	IEEE 802.11ax (80 MHz, MCS4, 99pc dc)	WLAN	8.33	±9.6
10736	AAC	IEEE 802.11ax (80 MHz, MCS5, 99pc dc)	WLAN	8.27	±9.6
10737	AAC	IEEE 802.11ax (80 MHz, MCS6, 99pc dc)	WLAN	8.36	±9.6
10738	AAC	IEEE 802.11ax (80 MHz, MCS7, 99pc dc)	WLAN	8.42	±9.6
10739	AAC	IEEE 802.11ax (80 MHz, MCS8, 99pc dc)	WLAN	8.29	±9.6
10740	AAC	IEEE 802.11ax (80 MHz, MCS9, 99pc dc)	WLAN	8.48	±9.6
10741	AAC	IEEE 802.11ax (80 MHz, MCS10, 99pc dc)	WLAN	8.40	±9.6
10742	AAC	IEEE 802.11ax (80 MHz, MCS11, 99pc dc)	WLAN	8.43	±9.6
10743	AAC	IEEE 802.11ax (160 MHz, MCS0, 90pc dc)	WLAN	8.94	±9.6
10744	AAC	IEEE 802.11ax (160 MHz, MCS1, 90pc dc)	WLAN	9.16	±9.6
10745	AAC	IEEE 802.11ax (160 MHz, MCS2, 90pc dc)	WLAN	8.93	±9.6
10746	AAC	IEEE 802.11ax (160 MHz, MCS3, 90pc dc)	WLAN	9.11	±9.6
10747	AAC	IEEE 802.11ax (160 MHz, MCS4, 90pc dc)	WLAN	9.04	±9.6
10748	AAC	IEEE 802.11ax (160 MHz, MCS5, 90pc dc)	WLAN	8.93	±9.6
10749	AAC	IEEE 802.11ax (160 MHz, MCS6, 90pc dc)	WLAN	8.90	±9.6
10750	AAC	IEEE 802.11ax (160 MHz, MCS7, 90pc dc)	WLAN	8.79	±9.6
10751	AAC	IEEE 802.11ax (160 MHz, MCS7, 90pc 6c)	WLAN	8.82	±9.6
10752	AAC				
	AAG	IEEE 802.11ax (160 MHz, MCS9, 90pc dc)	WLAN	8.81	±9.6

Certificate No: EX-7686\_Sep22

Page 18 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Unless other was baled une solute of the state and the state report refer only to the sample(s) lessed and state and provide the sample(s) lessed and state prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488



September 27, 2022

UID	Rev	Communication System Name	Group	PAR (dB)	Unc <sup>E</sup> k = 2
10753	AAC	IEEE 802.11ax (160 MHz, MCS10, 90pc dc)	WLAN	9.00	±9.6
10754	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc dc)	WLAN	8.94	±9.6
10755	AAG	IEEE 802.11ax (160 MHz, MCS0, 99pc dc)	WLAN	8.64	±9.6
10756	AAC	IEEE 802.11ax (160 MHz, MCS1, 99pc dc)	WLAN	8.77	±9.6
10757	AAC	IEEE 802.11ax (160 MHz, MCS2, 99pc dc)	WLAN	8.77	±9.6
10758	AAC	IEEE 802.11ax (160 MHz, MCS3, 99pc dc)	WLAN	8.69	±9.6
10759	AAC	IEEE 802.11ax (160 MHz, MCS4, 99pc dc)	WLAN	8.58	±9.6
10760	AAC	IEEE 802.11ax (160 MHz, MCS5, 99pc dc)	WLAN	8.49	±9.6
10761	AAC	IEEE 802.11ax (160 MHz, MCS6, 99pc dc)	WLAN	8.58	±9.6
10762	AAC	IEEE 802.11ax (160 MHz, MCS7, 99pc dc)	WLAN	8.49	±9.6
10763	AAC	IEEE 802.11ax (160 MHz, MCS8, 99pc dc)	WLAN	8.53	±9.6
10764	AAC	IEEE 802.11ax (160 MHz, MCS9, 99pc dc)	WLAN	8.54	±9.6
10765	AAC	IEEE 802.11ax (160 MHz, MCS10, 99pc dc)	WLAN	8.54	±9.6
10766	AAC	IEEE 802.11ax (160 MHz, MCS11, 99pc dc)	WLAN	8.51	±9,6
10767	AAC	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	7.99	±9.6
10768	AAC	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	±9.6
10769	AAC	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	±9.6
10770	AAC	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±9.6
10771	AAC	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±9.6
10772	AAC	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.23	±9.6
10773	AAC	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.03	±9.6
10774	AAC	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±9.6
10775	AAC	5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	±9.6
10776	AAC	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8:30	±9.6
10777	AAC	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	±9.6
10778	AAC	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.34	±9.6
10779	AAC	5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.42	±9.6
10780	AAC	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	+9.6
10781	AAC	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	±9.6
10782	AAC	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	±9.6
10783	AAC	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	±9.6
10784	AAC	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.29	±9.6
10785	AAC	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.40	±9.6
10786	AAC	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.35	±9.6
10787	AAC	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.44	±9.6
10788	AAC	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	±9.6
10789	AAC	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.35	±9.6
10790	AAC	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	19.6
10791	AAC	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.83	19.6
10792	AAC	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.92	19.6
10793	AAC	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 KHz)	5G NR FRI TDD	7.92	±9.6
10794	AAG	5G.NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 KHz)	5G NR FR1 TDD	7.95	±9.6
10795	AAC	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 KHz)		7.84	
10796	AAC	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 KHz)	5G NR FR1 TDD		±9.6
10798	AAC	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz) 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	±9.6
10798	AAC		5G NR FR1 TDD	8.01	±9.6
10798	AAG	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	±9.6
		5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±9.6
10801	AAC	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	±9.6
10802	AAC	5G NR (CP-OFDM, 1 RB, 90 MHz, OPSK, 30 kHz)	5G NR FR1 TDD	7.87	±9.6
20.4.62		5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±9.6
10805	AAD	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6
10806	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.37	±9.6
		5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6
10810	AAD	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6
10812	AAD	5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±9.6
10817	AAD	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±9.6
10818	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6
10819	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.33	±9.6
10820	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.30	±9.6
10821	AAC	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.6
10822	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8,41	±9.6
10823	AAC	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.36	±9.6
10824	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8,39	±9.6
10825	AAD	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.6
10827	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.42	±9.6
10828	AAE	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.43	±9.6

Certificate No: EX-7686 Sep22

Page 19 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Unless other was baled une solute of the state and the state report refer only to the sample(s) lessed and state and provide the sample(s) lessed and state prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488



# Report No: TESA2212000576E5 Page: 25 of 27

EX3DV4 - SN:7686

September 27, 2022

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10829	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.40	±9.6
10830	AAD	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.63	±9.6
10831	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.73	±9.6
10832	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.74	±9.6
10833	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	±9.6
10834	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.75	±9.6
10835	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	±9.6
10836	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.66	±9.6
10837	AAD	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.68	±9.6
10839	AAD	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	+9.6
10840	AAD	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.67	±9.6
10841	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.71	±9.6
10843	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.49	±9.6
10844	AAD	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±9.6
10846	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
10854	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±9.6
10855	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	+9.6
10856	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 KHz)	5G NR FR1 TDD	8.37	±9.6
10856	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 KHz)	5G NR FR1 TDD	8.35	±9.6
10857	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 KHz)	5G NR FR1 TDD	8.35	+9.6
10858	AAD	5G NR (CP-OFDM, 100% HB, 30 MHz, QPSK, 60 KHz) 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.35	
10859	AAD	5G NR (CP-OFDM, 100% HB, 40 MHz, QPSK, 60 KHz) 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 KHz)	5G NR FR1 TDD	8.34	±9.6
10861	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 KHz)	5G NR FR1 TDD	8.41	±9.6
	AAD				-
10863	AAE	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
10864		5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	±9.6
10865	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
		5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10868	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.89	±9.6
10869	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	±9.6
10870	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.86	±9.6
10871	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.75	±9.6
10872	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.52	±9.6
10873	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	±9.6
10874	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	±9.6
10875	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	±9.6
10876	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.39	±9.6
10877	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	7.95	±9.6
10878	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.41	±9,6
10879	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.12	±9.6
10880	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.38	±9.6
10881	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	±9.6
10882	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.96	±9.6
10883	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.57	±9.6
10884	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.53	±9.6
10885	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	±9.6
10886	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	±9.6
10887	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7,78	±9.6
10888	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	B.35	±9.6
10889	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	B.02	±9.6
10890	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.40	±9.6
10891	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.13	±9.6
10892	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.41	±9.6
10897	AAD	5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.66	±9.6
10898	AAD	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	±9.6
10899	AAD	5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	±9.6
10900	AAD	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10901	AAD	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10902	AAD	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10903	AAD	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10904	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10905	AAD	5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10906	AAD	5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10907	AAD	5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.78	±9.6
10908	AAD	5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	±9.6
10909	AAD	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.96	±9.6
10910	AAD	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	±9.6

Certificate No: EX-7686 Sep22

Page 20 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Unless other was baled une solute of the state and the state report refer only to the sample(s) lessed and state and provide the sample(s) lessed and state prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488

www.sgs.com.tw



# Report No: TESA2212000576E5 Page: 26 of 27

EX3DV4 - SN:7686

September 27, 2022

UID	Rev	Communication System Name	Group	PAR (dB)	Unc <sup>E</sup> k = 2
10911	AAD	5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	±9.6
10912	AAD	5G NR (DFT-8-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10913	AAD	5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10914	AAD	5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.85	±9.6
10915	AAD	5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	±9.6
10916	AAD	5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	±9.6
10917	AAD	5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94	±9,6
10918	AAD	5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86	±9.6
10919	AAD	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86	±9.6
10920	AAD	5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	±9.6
10921	AAD	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10922	AAD	5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.82	±9.6
10923	AAD	5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10924	AAD	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10925	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.95	±9.6
10926	AAD	5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10927	AAD	5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94	±9.6
10928	AAD	5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	±9.6
10929	AAD	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	±9.6
10930	AAD	5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	±9.6
10931	AAD	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
10932	AAB	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
10933	AAA	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
10934	AAA	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
10935	AAA	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
10936	AAC	5G NR (DFT-s-OFDM, 50% RB, 5MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	±9.6
10937	AAB	5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.77	+9.6
10938	AAB	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	±9.6
10939	AAB	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.82	±9.6
10940	AAB	5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.89	±9.6
10941	AAB	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	+9.6
10942	AAB	5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	±9.6
10943	AAB	5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.95	±9.6
10944	AAB	5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.81	±9.6
10945	AAB	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	±9.6
10946	AAC	5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	±9.6
10947	AAB	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	±9.6
10948	AAB	5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	±9.6
10949	AAB	5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	±9.6
10950	AAB	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	±9.6
10951	AAB	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.92	±9.6
10952	AAB	5G NR DL (CP-OFDM, TM 3.1, 5MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.25	+9.6
10953	AAB	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.15	+9.6
10954	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.23	±9.6
10955	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.42	±9.6
10956	AAB	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.14	±9.6
10957	AAC	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FRI FDD	8.31	±9.6
10958	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.61	±9.6
10959	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.33	±9.6
10960	AAB	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.32	±9.6
10961	AAB	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.36	±9.6
10962	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.40	±9.6
10963	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.55	±9.6
10964	AAB	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.29	±9.6
10965	AAB	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.37	±9.6
10966	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.55	±9.6
10967	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.42	±9.6
10968	AAB	5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.49	±9.6
10972	AAB	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	11.59	±9.6
10973	AAB	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	9.06	±9.6
10974	AAB	5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz)	5G NR FR1 TDD	10.28	±9.6
10978	AAA	ULLA BDR	ULLA	2.23	+9.6
10979	AAA	ULLA HDR4	ULLA	7.02	±9.6
10980	AAA	ULLA HDR8	ULLA	8.82	±9.6
10981	AAA	ULLA HDRp4	ULLA	1.50	29.6
	AAA	ULLA HDRp8	ULLA	1100	1.9.0

Certificate No: EX-7686 Sep22

Page 21 of 22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

t (886-2) 2299-3279

Unless other was baled une solute of the state and the state report refer only to the sample(s) lessed and state and provide the sample(s) lessed and state prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488



# Report No: TESA2212000576E5 Page: 27 of 27

#### EX3DV4 - SN:7686

September 27, 2022

UID	Rev	Communication System Name	Group	PAR (dB)	Unc <sup>E</sup> k = 2
10983	AAA	5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.31	±9.6
10984	AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.42	±9.6
10985	AAA	5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.54	±9.6
10986	AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.50	±9.6
10987	AAA	5G NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.53	±9.6
10988	AAA	5G NR DL (CP-OFDM, TM 3.1, 70 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.38	±9.6
10989	AAA	5G NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.33	±9.6
10990	AAA	5G NR DL (CP-OFDM, TM 3.1, 90 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.52	±9.6

E Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

Certificate No: EX-7686 Sep22

Page 22 of 22

# - End of report -

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com.tw/Terms-and-Conditions">http://www.sgs.com.tw/Terms-and-Conditions</a> and for electronic format documents subject to Terms and Conditions for Electronic Documents at <u>http://www.sgs.com.tw/Terms-and-Conditions</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488