

Page: 1 of 72

Appendix B - DAE & Probe Calibration Certificate

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





Service suisse d'étalonnage Servizio svizzero di taratura

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

Accreditation No.: SCS 0108

Certificate No: DAE4-1336_Aug23

CALIBRATION CERTIFICATE DAE4 - SD 000 D04 BM - SN: 1336 QA CAL-06.v30 Calibration procedure for the data acquisition electronics (DAE) Calibration date: August 22, 2023 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate. All calibrations have been conducted in the closed laboratory facility; environment temperature (22 ± 3)°C and humidity < 70%. Calibration Equipment used (M&TE critical for calibration) Primary Standards Cal Date (Certificate No.) Scheduled Calibration Keithley Multimeter Type 2001 SN: 0810278 29-Aug-22 (No:34389) Scheduled Check SE UWS 053 AA 1001 27-Jan-23 (in house check) SE UMS 006 AA 1002 27-Jan-23 (in house check) Auto DAE Calibration Unit In house check: Jan-24 In house check: Jan-24 Calibrated by: Dominique Steffen Laboratory Technician Technical Manager Approved by: Sven Kühn This calibration certificate shall not be reproduced except in full without written approval of the laboratory

Certificate No: DAE4-1336_Aug23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



Page: 2 of 72

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





Service suisse d'étalonnage 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

Glossarv

data acquisition electronics Connector angle

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
 - 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
 - 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

Certificate No: DAE4-1336_Aug23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



Page: 3 of 72

DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = 6.1μV , full range = -100...+300 mV

Low Range: 1LSB = 61nV , full range = -1,.....+3mV

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

Calibration Factors	X	Y	Z
High Range	403,409 ± 0.02% (k=2)	403.708 ± 0.02% (k=2)	403.191 ± 0.02% (k=2)
Low Range	3.94786 ± 1.50% (k=2)	3.98826 ± 1.50% (k=2)	3.99730 ± 1.50% (k=2)

Connector Angle

Connector Angle to be used in DASY system	337.0 ° ± 1 =
9	307.U I

Certificate No: DAE4-1336_Aug23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 4 of 72

Appendix (Additional assessments outside the scope of SCS0108)

1. DC Voltage Linearity

High Range	Reading (μV)	Difference (μV)	Error (%)
Channel X + Input	200034.57	-2.61	-0.00
Channel X + Input	20008.00	0.98	0.00
Channel X - Input	-20002.66	2.86	-0.01
Channel Y + Input	200034.68	-2.41	-0.00
Channel Y + Input	20005.78	-1.05	-0.01
Channel Y - Input	-20006.80	-1.16	0.01
Channel Z + Input	200034.29	-5.84	-0.00
Channel Z + Input	20005.44	-1.40	-0.01
Channel Z - Input	-20006.81	-1.11	0.01

Low Range	Reading (μV)	Difference (μV)	Error (%)
Channel X + Input	2002.17	0.09	0.00
Channel X + Input	202.07	0.14	0.07
Channel X - Input	-197.77	0.14	-0.07
Channel Y + Input	2002.04	0.04	0.00
Channel Y + Input	201.12	-0.70	-0.35
Channel Y - Input	-199.16	-1.22	0.61
Channel Z + Input	2002.00	0.10	0.00
Channel Z + Input	201.03	-0.66	-0.33
Channel Z - Input	-199.16	-1.09	0.55

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	5.77	4.67
	- 200	-3.95	-5.42
Channel Y	200	-3.78	-4.12
	- 200	2.45	2.00
Channel Z	200	24.22	24.20
	- 200	-26.84	-26.49

3. Channel separation

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

	Input Voltage (mV)	Channel X (µV)	Channel Y (µV)	Channel Z (μV)
Channel X	200		5.59	-1.06
Channel Y	200	8.91	-	7.26
Channel Z	200	8.42	6.47	-

Certificate No: DAE4-1336_Aug23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 5 of 72

4. AD-Converter Values with inputs shorted

	High Range (LSB)	Low Range (LSB)
Channel X	15677	16373
Channel Y	15918	16565
Channel Z	15844	14281

5. Input Offset Measurement

DASY measurement parameters: Auto Zero Time; 3 sec; Measuring time; 3 sec Input $10M\Omega$

	Average (μV)	min. Offset (μV)	max. Offset (μV)	Std. Deviation (µV)
Channel X	2.01	0.92	3.40	0.39
Channel Y	-0.64	-1.49	2.48	0.44
Channel Z	-1.79	-2.88	-0.60	0.39

6. Input Offset Current

al 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 inf

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: DAE4-1336_Aug23

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 6 of 72

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





Schweizerischer Kalibrierdienst Service suisse d'étalonnage Servizio svizzero di taratura

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

Accreditation No.: SCS 0108

Certificate No: DAE4ip-1824_Aug23

CALIBRATION CERTIFICATE DAE4ip - SD 000 D14 AD - SN: 1824 QA CAL-06,v30 Calibration procedure for the data acquisition electronics (DAE) August 08, 2023 Calibration date: This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate. All calibrations have been conducted in the closed laboratory facility; environment temperature $(22 \pm 3)^{\circ}$ C and humidity < 70%. Calibration Equipment used (M&TE critical for calibration) imary Standards ID# Cal Date (Certificate No.) Scheduled Calibration Keithley Multimeter Type 2001 SN: 0810278 Secondary Standards ID# Check Date (in house) Scheduled Check SE UMS 053 AA 1001 27-Jan-23 (in house check) SE UMS 006 AA 1002 27-Jan-23 (in house check) Auto DAE Calibration Unit In house check: Jan-24 In house check: Jan-24 Calibrator Box V2.1 Calibrated by: Adrian Gehring Laboratory Technician Approved by: Sven Kühn Technical Manager This calibration certificate shall not be reproduced except in full without written approval of the laboratory

Certificate No: DAE4ip-1824_Aug23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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

www.sqs.com.tw



Page: 7 of 72

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





Service suisse d'étalonnage C Servizio svizzero di taratura 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

data acquisition electronics DAE

Connector angle 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
 - 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

Certificate No: DAE4lp-1824 Aug23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



Page: 8 of 72

DC Voltage Measurement

A/D - Converter Resolution nominal
High Range: 1LSB =
Low Range: 1LSB =

Calibration Factors	X	Y	Z
High Range	405.243 ± 0.02% (k=2)	405.691 ± 0.02% (k=2)	405.284 ± 0.02% (k=2)
Low Range	3.98806 ± 1.50% (k=2)	3.95628 ± 1.50% (k=2)	4.01423 ± 1.50% (k=2)

Connector Angle

Connector Angle to be used in DASY system	72.0 ° ± 1. **
---	----------------

Certificate No: DAE4ip-1824_Aug23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 9 of 72

Appendix (Additional assessments outside the scope of SCS0108)

1. DC Voltage Linearity

High Range	Reading (µV)	Difference (µV)	Error (%)
Channel X + Input	200038.18	1.49	0.00
Channel X + Input	20007.84	0.93	0.00
Channel X - Input	-20002.64	2.95	-0.01
Channel Y + Input	200033.70	-6.14	-0.00
Channel Y + Input	20004.96	-1.83	-0.01
Channel Y - Input	-20006.89	-1.16	0.01
Channel Z + Input	200033.39	-3.28	-0.00
Channel Z + Input	20005.16	-1.63	-0.01
Channel Z - Input	-20006.28	-0.49	0.00

Low Range	Reading (μV)	Difference (µV)	Error (%)
Channel X + Input	2002.39	0.17	0.01
Channel X + Input	200.85	-1.17	-0.58
Channel X - Input	-198.61	-0.67	0.34
Channel Y + Input	2002.08	0.02	0.00
Channel Y + Input	200.75	-1.13	-0.56
Channel Y - Input	-199.09	-0.92	0.47
Channel Z + Input	2002.10	0.14	0.01
Channel Z + Input	200.95	-0.80	-0.39
Channel Z - Input	-199.13	-0.94	0.47

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	-18.33	-19.79
	- 200	19.92	18.85
Channel Y	200	-20.08	-20.52
	- 200	19.21	18.44
Channel Z	200	-20.35	-20,65
	- 200	19.78	19.74

3. Channel separation

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

	Input Voltage (mV)	Channel X (μV)	Channel Y (µV)	Channel Z (µV)
Channel X	200		0.42	+1.89
Channel Y	200	4.22	-	2.62
Channel Z	200	7.80	2.03	- 4

Certificate No: DAE4ip-1824_Aug23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 10 of 72

4. AD-Converter Values with inputs shorted

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

	High Range (LSB)	Low Range (LSB)
Channel X	15954	15575
Channel Y	15911	15849
Channel Z	16005	15544

5. Input Offset Measurement

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec input $10M\Omega$

	Average (μV)	min. Offset (μV)	max. Offset (μV)	Std. Deviation (µV)
Channel X	0.81	-0.35	1.87	0.42
Channel Y	-0.80	-1.63	0.16	0.35
Channel Z	-0.72	-2.13	0.12	0.39

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: DAE4ip-1824_Aug23

Page 5 at 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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 11 of 72

Calibration Laboratory of Schmid & Partner Engineering AG





Service suisse d'étalonnage Servizio svizzero di taratura Swiss Calibration Service C

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

Accreditation No.: SCS 0108

SGS

Certificate No.

EX-7509_Apr23

CALIBRATION CERTIFICATE

EX3DV4 - SN:7509 Object Calibration procedure(s) QA CAL-01.v10, QA CAL-12.v10, QA CAL-14.v7, QA CAL-23.v6, Calibration procedure for dosimetric E-field probes April 26, 2023 Calibration date This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (St). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3) °C and humidity < 70%. Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP2	SN: 104778	30-Mar-23 (No. 217-03804/03805)	Mar-24
Power sensor NRP-Z91	SN: 103244	30-Mar-23 (No. 217-03804)	Mar-24
OCP DAK-3.5 (weighted)	SN: 1249	20-Oct-22 (OCP-DAK3.5-1249 Oct22)	Oct-23
OCP DAK-12	SN: 1016	20-Oct-22 (OCP-DAK12-1016 Oct22)	Oct-23
Reference 20 dB Attenuator	SN: CC2552 (20x)	30-Mar-23 (No. 217-03809)	Mar-24
DAE4	SN: 660	16-Mar-23 (No. DAE4-660 Mar23)	Mar-24
Reference Probe ES3DV2	SN: 3013	06-Jan-23 (No. ES3-3013 Jan23)	Jan-24

Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-22)	In house check: Jun-24
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-22)	In house check: Oct-24

sician Stylling
er 9.2
ag

Certificate No: EX-7509_Apr23

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



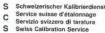
Page: 12 of 72

Calibration Laboratory of

Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland







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

tissue simulating liquid sensitivity in free space sensitivity in TSL / NORMx,y,z diode compression point NORMx,v,z ConvF DCP CF

diode compression point crest factor (1/duty_cycle) of the RF signal modulation dependent linearization parameters A, B, C, D

 ψ rotation around probe axis θ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\theta=0$ is Polarization ()

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≤900MHz in TEM-cell; f>1800MHz. 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 ConvF).
- below convry.

 NORM(IN, xz = NORMx, y.z * 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
- 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
 As, yz; Bs, yz; Cs, yz; Ds, yz; VRs, yz; 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.
- calibration range expressed in HMS voltage across the diode.

 ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for 1 ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for 1 > 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 improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORIMx,y,z ** ConvF* whereby the uncertainty corresponds to that given for ConvF. A trequency dependent ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ** AFMM+br.** 1100 MHz**. ±50 MHz to ±100 MHz.
- Spherical isotropy (3D deviation from isotropy); in a field of low gradients realized using a flat phantom exposed by a patch
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis).
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

Certificate No: EX-7509 Apr23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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

台灣檢驗科技股份有限公司



Page: 13 of 72

EX3DV4 - SN:7509

April 26, 2023

Parameters of Probe: EX3DV4 - SN:7509

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k = 2)
Norm $(\mu V/(V/m)^2)$ A	0.62	0.68	0.67	±10.1%
DCP (mV) B	105.6	101,3	104.1	±4.7%

Calibration Results for Modulation Response

UID	Communication System Name		A dB	dB√μV	C	D dB	VR mV	Max dev.	Max Unc ^E k = 2		
0	CW	X	0.00	0.00	1.00	0.00	124.6	±2.0%	±4.7%		
		Y	0.00	0.00	1.00		121.9				
		Z	0.00	0.00	1.00		130.9				
10352	Pulse Waveform (200Hz, 10%)	X	12.00	74.00	11.00	10.00	60.0	±2.9%	±2.9%	±2.9%	±9.6%
		Y	1.37	60.00	5.73		60.0	-	1000		
		Z	1.54	60.58	6.20		60.0				
10353	Pulse Waveform (200Hz, 20%)	X	0.85	60.00	4.70	6.99	80.0	±2.6%	±9.6%		
		Y	6.00	68.00	7.00		80.0	±2.6%			
		Z	0.80	60.00	4.72		80.0				
10354	Pulse Waveform (200Hz, 40%)	X	0.29	150.82	1.43	3.98	95.0		±9.6%		
		Y	0.26	124.83	1.28		95.0		2010.0		
		Z	0.20	145.73	0.04		95.0				
10355	Pulse Waveform (200Hz, 60%)	X	7.92	159.47	21.74	2.22	120.0	±1.7%	±9.6%		
		Y	4.49	158.96	8.67		120.0		3000	20,000	
		2	6.87	159.94	13.96		120.0				
10387	QPSK Waveform, 1 MHz	X	0.57	63.85	11.83	1.00	150.0	±5.1%	±9.6%		
		Y	0.53	61.34	10.12		150.0	24.10	20,070		
		Z	0.71	64.24	12.22		150.0				
10388	QPSK Waveform, 10 MHz	X	1.35	65.75	13.66	0.00	150.0	±1.3%	±9.6%		
		Y	1.23	63.37	12.51		150.0				
		Z	1.43	65.40	13.88		150.0				
10396	64-QAM Waveform, 100 kHz	X	1.81	65.76	16.48	3.01	150.0	=1.4%	±9.6%		
		Y	1.57	63.09	15.29		150.0				
		Z	1.59	63.47	15,54		150.0				
10399	64-QAM Waveform, 40 MHz	X	2.84	66.33	14.99	0.00	150.0	±2.8%	±9.6%		
		Y	2.87	65.78	14.71		150.0			_ 5.0 /	
		Z	2.90	65.96	14.92		150.0				
10414	WLAN CCDF, 64-QAM, 40 MHz	X	3.85	65.99	15.19	0.00	150.0	±4.8%	±9.6%		
		Y	3.97	65.57	15.08	1	150.0				
		Z	4.15	66.30	15.52		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%.

Certificate No: EX-7509 Apr23

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.

A The uncertainties of Norm X,YZ do not affect the E²-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. Seviation from linear response applying rectangular distribution and is expressed for the aquare of the field value.



Page: 14 of 72

EX3DV4 - SN:7509

April 26, 2023

Parameters of Probe: EX3DV4 - SN:7509

Sensor Model Parameters

	C1 fF	C2 fF	ν-1	T1 ms V ⁻²	T2 ms V ⁻¹	T3 ms	T4 V-2	T5 V-1	T6
X	10.3	74.02	32.94	4.75	0.00	4.90	0.57	0.00	1.00
У	12.6	93.80	35.18	2.63	0.00	4.90	0.00	0.06	1.01
Z	13.1	95.43	33.70	2.44	0.00	4.90	0.00	0.04	1.00

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle	-66.5°
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-7509_Apr23

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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

www.sgs.com.tw



Page: 15 of 72

EX3DV4 - SN:7509 April 26, 2023

Parameters of Probe: EX3DV4 - SN:7509

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity ^F (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k = 2)
750	41.9	0.89	9.97	9.73	10.82	0.38	1.27	±12.0%
835	41.5	0.90	9.51	9.16	10.00	0.37	1.27	±12.0%
900	41.5	0.97	9.19	9.63	9.82	0.37	1.27	±12.0%
1750	40.1	1.37	8.60	8.56	9.12	0.26	1.27	±12.0%
1900	40.0	1.40	8.12	8.05	8.74	0.28	1.27	±12.0%
2000	40.0	1.40	7.93	7.93	8.48	0.29	1.27	±12.0%
2300	39.5	1.67	7.70	7.70	8.27	0.29	1.27	±12.0%
2450	39.2	1.80	7.61	7.61	8.17	0,27	1.27	±12.0%
2600	39.0	1.96	7.53	7.51	8.07	0.27	1.27	±12.0%
3300	38.2	2.71	6.91	6.91	7.38	0.33	1.27	±14.0%
3500	37.9	2.91	6.84	6.84	7.31	0.35	1.27	±14.0%
3700	37.7	3.12	6.68	6.66	7.12	0.34	1.27	±14.0%
3900	37.5	3.32	6.74	6.73	7.20	0.35	1.27	±14.0%
4100	37.2	3.53	6.57	6.56	7.02	0.36	1.27	±14.0%
4200	37.1	3.63	6.45	6.47	6.92	0.36	1.27	±14.0%
4400	36.9	3.84	6.34	6.36	6.80	0.37	1.27	±14.0%
4600	36.7	4.04	6.36	6.39	6.83	0.37	1.27	±14.0%
4800	36.4	4.25	6.60	6.60	7.06	0.35	1.27	±14.0%
4950	36.3	4.40	6.00	6.06	6.44	0.41	1.36	±14.0%
5250	35.9	4.71	5,58	5.65	6.02	0.32	1.72	±14.0%
5600	35.5	5.07	4.82	4.82	5.14	0.39	1.67	±14.0%
5750	35.4	5.22	5.12	5.16	5,51	0.37	1.75	±14.0%
5850	35.2	5.32	4.93	4.95	5,32	0.40	1.78	±14.0%

C Prequency 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 RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ±10, 25, 40, 90 and 70 MHz for ConvF assessed at 84, 4128, 150 and 220 MHz respectively. Validity of ConvF assessed at 86 MHz is 4-9 MHz, and ConvF assessed at 18 MHz is 4-19 MHz. Above 5 GHz frequency validity can be extended to ±110 MHz.

"The probes are calibrated using itsues simulating liquids (TSL Intel deviate for z and 7 by less than ±5% from the target values (typically better than ±3%) and are valid for TSL with deviations from the target of less than ±5% are used, the calibration uncertainties are 11.1% to 7 - 3 GHz and 13.1% for 7 = 6 GHz.

Certificate No: EX-7509_Apr23

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.

⁹ Alpha/Dopth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than 11% for frequencies below 3 GHz and below 12% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the



Page: 16 of 72

EX3DV4 - SN:7509

April 26, 2023

Parameters of Probe: EX3DV4 - SN:7509

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity ^F (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k = 2)
6500	34.5	6.07	5.17	5.15	5.52	0.20	2.50	±18.6%
7000	33.9	6.65	5.45	5.46	5.88	0.20	2.00	±18.6%

Certificate No: EX-7509_Apr23

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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

C Frequency validity at 6.5 GHz is -800* 700 MHz, and ±700 MHz at or above 7 GHz. The uncertainty is tire RSS of the CenvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

The problem are calibrated using issues inhulating logids (TSL) that deviate for c and or by less than +10% from the target values (typically better than ±6%), and are valid for TSL with deviations of up to ±10%.

A physhopeth are determined during oaithvalino. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less 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.

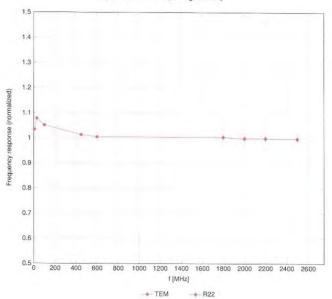


Page: 17 of 72

EX3DV4 - SN:7509 April 26, 2023

Frequency Response of E-Field

(TEM-Cell:ifi110 EXX, Waveguide:R22)



Uncertainty of Frequency Response of E-field: ±6.3% (k=2)

Certificate No: EX-7509 Apr23

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.

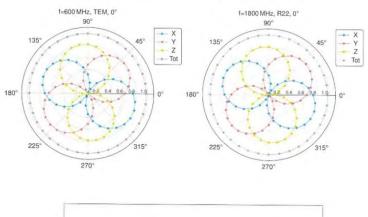
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留的天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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

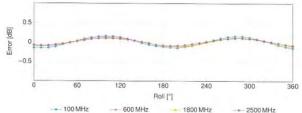


Page: 18 of 72

EX3DV4 - SN:7509 April 26, 2023

Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$





Uncertainty of Axial Isotropy Assessment: ±0.5% (k=2)

Certificate No: EX-7509 Apr23

Page 8 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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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

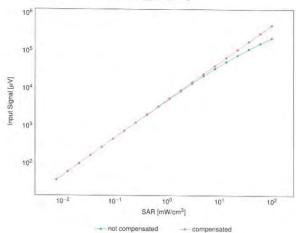


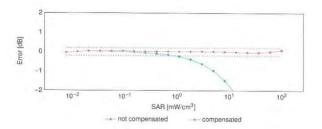
Page: 19 of 72

EX3DV4 - SN:7509 April 26, 2023

Dynamic Range f(SAR_{head})

(TEM cell, f_{eval} = 1900 MHz)





Uncertainty of Linearity Assessment: ±0.6% (k=2)

Certificate No: EX-7509_Apr23

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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

www.sqs.com.tw

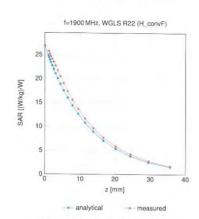


Page: 20 of 72

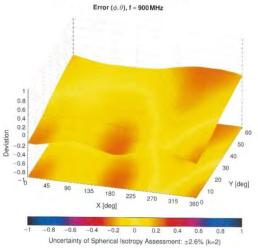
EX3DV4 - SN:7509

April 26, 2023

Conversion Factor Assessment



Deviation from Isotropy in Liquid



Certificate No: EX-7509_Apr23

Page 10 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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 21 of 72

EX3DV4 - SN:7509

April 26, 2023

Appendix: Modulation Calibration Parameters

סונו	Rev	Communication System Name	Group	PAR (dB)	UncE k =
0	0.10	CW	CW	0.00	±4.7
0010	CAB	SAR Validation (Square, 100 ms, 10 ms)	Test	10.00	±9.6
0011	CAC	UMTS-FDD (WCDMA)	WCDMA	2.91	±9.6
0012	CAB	JEEE 802 11b WiFi 2 4 GHz (DSSS, 1 Mbps)	WLAN	1.87	+9.6
0013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	+9.6
0021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	±9.6
0023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	±9.6
0024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	19.6
0025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	19.6
0026	DAG	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	±9.6
0027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	±9.6
0028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	±9.6
0029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	
0030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)			±9.6
0031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth Bluetooth	5.30	+9.6
0032	DAA	JEEE 802.15.1 Bluetooth (GFSK, DH5)		1.87	±9.6
0033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	1.16	±9.6
0034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	7.74	±9.6
0035	CAA	IEEE 802.15.1 Bluetooth (Pl/4-DQPSK, DH5)	Bluetooth	4.53	±9.6
0035	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	3.83	±9.6
0037	CAA	fEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	8.01	+9.6
0037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	+9.8
0039	CAB	CDMA2000 (1xRTT, RC1)	Bluetooth	4.10	±9.6
0039	CAB		CDMA2000	4.57	±9.6
0042	CAA	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	+9.6
		IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	±9.6
0048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DEGT	13.80	±9.6
0049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12).	DECT	10.79	±9.6
0056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	±9.6
0058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	+9.6
0059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	±9.6
0060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	±9.6
0061	CAB	IEEE 802 11b WiFi 2,4 GHz (DSSS, 11 Mbps)	WLAN	3.60	+9.6
0062	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	+9.6
0063	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	±9.6
0064	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, T2 Mbps)	WLAN	9.09	±9.6
0065	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	±9.6
0066	CAD	IEEE 802.11a/h WIFI 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	+9.6
0067	CAD	IEEE 802.11a/h WIFI 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	+9.6
0068	CAD	IEEE 802.11a/h WIFI 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	±9.6
0069	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	±9.6
0071	CAB	IEEE 802,11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	
0072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	±9.6
0073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	
0074	CAB	IEEE B02.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	±9.6
0075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.30	±9.6
0076	CAB	IEEE 802.11g WiFI 2.4 GHz (DSSS/OFDM, 48 Mbps)			±9.6
0077	CAB	IEEE 802.11g WiFt 2.4 GHz (DSSS/OFDM, 46 Mbps)	WLAN	10.94	±9.6
0081	CAB	CDMA2000 (1xRTT, RC3)		11:00	±9.6
0082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	CDMA2000	3.97	±9.6
0090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	AMPS	4.77	±9.6
0.097	CAC	UMTS-FDD (HSDPA)	GSM	6.56	±9.6
0098	CAC	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	±9.6
0099	DAG		WCDMA	3.98	±9.6
		EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	±9.6
0100	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5,67	±9.6
0101		LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
0102	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	B:60	±9.6
0103	CAH	LTE-TDD (SC-FDMA, 100% RB. 20 MHz, QPSK)	LTE-TD0	9.29	+9.6
0104	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	±9.6
0105	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10,01	±9.6
0108	GAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	±9.6
0109	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	+9.6
	ONLL	LTE-FDD (SC-FDMA, 100% RB. 5 MHz, QPSK)	LTE-FOD	5.75	±9.6
0110	CAH				

Certificate No: EX-7509_Apr23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 22 of 72

EX3DV4 - SN:7509 April 26, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
10112	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FOD	6.59	±9.6
10113	CAH	LTE-FDD (SC-FDMA, 100% RB, 5MHz, 64-QAM)	LTE-FDD	6.62	±9.6
0114	CAD	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	
0115	CAD	IEEE 802.11n (HT Greenfield, B1 Mbps, 16-QAM)	WLAN		19.6
0116	CAD	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)		8.46	±9.6
0117	CAD	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.15	±9.6
0118	CAD		WLAN	8.07	±9.6
0119	CAD	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	±9.6
		IEEE 802.11n (HT Mozed, 135 Mops, 64-QAM)	WLAN	8.13	+9.6
0140	CAF	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	19.6
0141	CAF	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	±9.6
0142	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
0143	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	
0144	CAF	LTE-FDD (SC-FDMA, 100% RB, 3MHz, 64-QAM)	LTE-FDD		±9.6
0145	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)		6.65	±9.6
0146	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	5.76	+9.6
0147	CAG		LTE-FDD	6.41	±9.6
		LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	±9.6
0149	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
0150	CAF	LTE-FDD (SC-FDMA, 50% RB. 20 MHz, 64-QAM)	LTE-FDD	6.60	+9.6
0151	CAH	LTE-TDD (SC-FDMA, 50% RB; 20 MHz, QPSK)	LTE-TDD	9.28	±9.6
0152	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	±9.6
0153	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TOD		
0154	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)		10,05	±9,6
0155	CAH		LTE-FDD	5.75	±9.6
		LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	19.6
0156	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FD0	5.79	±9.6
0.157	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16 QAM)	LTE-FDD	6.49	±9.6
0158	CAH	LTE-FDD (SC-FDMA, 50% RB. 10 MHz, 64-QAM)	LTE-FDD	6.82	±9.6
0159	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	UTE-FDD	6.56	
0160	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)			±9.6
0161	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	5.82	+9.6
0162	CAF	LTE-FOO (SC-FOMA, SOS-RB, TOMPZ, TO-CAM)	LTE-FDD	6.43	#9.6
		LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	±9.6
0166	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	±9.6
0167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4MHz, 16-QAM)	LTE-FDD	6.21	±9.6
0168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	+9.6
0169	CAF	LTE-FDD (SC-FDMA, 1 RB, 20MHz, QPSK)	LTE-FDD	5.73	±9.6
0170	CAF	LTE-FDD (SC-FDMA, 1 RB, 20MHz, 16-QAM)	LTE-FDD	6.52	
0171	AAF	LTE-FDD (SC-FDMA, 1 RB, 20MHz, 64-QAM)	LTE-FDD		±9.6
0172	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)		6.49	+9.6
0173	CAH		LTE-TDD	9.21	+9.6
		LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TOD	9.48	±9.8
0174	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 84-QAM)	LTE-TDD	10.25	±9.6
0175	CAH	LTE-FDD (SC-FDMA, 1 RB, 10MHz, QPSK)	LTE-FDD	5.72	±9.6
0176	CAH	LTE-FDD (SC-FDMA, 1 RB, 10MHz, 16-QAM)	LTE-FDD	6.52	19.6
0177	CAJ	LTE-FDD (SC-FDMA, 1 RB, 5MHz, QPSK)	LTE-FDD	5.73	±9.6
0178	CAH	LTE-FDD (SC-FDMA, 1 RB, 5MHz, 16-QAM)	LTE-FDD	6.52	
0179	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)			±9.6
0180	CAH	LTE-FDD (SG-FDMA, 1 RB, 5MHz, 64-QAM)	LTE-FDD	6.50	±9.6
			LTE-FDD	6.50	+9.6
0181	CAF	LTE-FDD (SC-FDMA, 1 RB, 15MHz, QPSK)	LTEFOD	5.72	±9.6
0182	CAF	LTE-FDD (SC-FDMA, 1 RB, 15MHz, 16-QAM)	LTE-FDD	6.52	±9.6
0183	AAE	LTE-FDD (SC-FDMA, 1 RB, 15MHz, 64-QAM)	LTE-FOD	6.50	±9.6
0184	CAF	LTE-FDD (SC-FDMA, 1 RB, 3MHz, QPSK)	LTE-FDD	5.73	+9.6
0185	CAF	LTE-FDD (SC-FDMA, 1 RB, 3MHz, 18-QAM)	LTE-FDD	6.51	+9.6
0186	AAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD		
0187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)		6.50	±9.6
0188	CAG		LTE-FDD	5.73	±9.6
		LTE-FDD (SC-FDMA, 1 RB, 1.4MHz, 16-QAM)	LTE-FDD	6.52	±9.6
0189	AAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
0193	CAD	IEEE 802.11n (HT Greenfield, 6.5Mbps, BPSK)	WLAN	8.09	19.6
0194	CAD	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	±9.6
0195	CAD	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	±9.6
0196	CAD	IEEE 802.11n (HT Mixed, 6.5 Mbgs, BPSK)	WLAN	8.10	±9.6
0197	CAD	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	
0198	CAD	IEEE 802.11n (HT Mixed, 85 Mbps, 64-QAM)			+9.6
0219	CAD	IEEE B02.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	±9.6
			WLAN	8.03	±9.6
0220	CAD	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	±9.6
0221	CAD	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	±9.8
0222	CAD	IEEE B02.11n (HT Mored, 15 Mbps, BPSK)	WLAN	8.06	±9.6
0223	CAD	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	+9.6
	CAD	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	±9.6

Certificate No: EX-7509 Apr23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 23 of 72

EX3DV4 - SN:7509 April 26, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10225	CAC	UMTS-FDD (HSPA+)	WCDMA	5.97	±9.6
10226	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	±9.6
10227	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4MHz, 64-QAM)	LTE-TOD	10.26	+9.6
10228	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4MHz, QPSK)	LTE-TDD	9.22	±9.6
10229	CAE	LTE-TDD (SC-FDMA, 1 RB, 3MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10230	CAE	LTE-TDD (SC-FDMA, 1 RB, 3MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10231	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	19.6
10232	CAH	LTE-TDD (SC-FDMA, 1 RB, 5MHz, 16-QAM)	LTE-TDD	9.48	+9.6
10233	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD		
10234	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)		10.25	±9.6
10235	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.21	±9.6
10236	CAH	LTE-TDD (SC-FDMA, 1 RB. 10 MHz, 64-QAM)	LTE-TDD	9.48	±9.6
10237	CAH	LTE-TDD (SC-FDMA, 1 RB. 10 MHz, QPSK)	LTE-TDD	10.25	±9.6
10238	CAG		LTE-TDD	9.21	±9.6
10239	CAG	LTE-TDD (SC-FDMA, 1 RB, 15MHz, 16-QAM)	LTE-TDD	9.48	±9.6
		LTE-TDD (SC-FDMA, 1 RB, 15MHz, 64-QAM)	LTE-TDD	10.25	±9.8
10240	CAG	LTE-TDD (SC-FDMA, 1 RB, 15MHz, QPSK)	LTE-TDD	9.21	±9.6
10241	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	±9.6
10242	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	±9.8
10243	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	±9.6
10244	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	±9.6
10245	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TOD	10.06	±9.6
10248	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TOD	9.30	19.6
10247	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	+9.6
10248	CAH	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 64-QAM)	LTE-TDD	10.09	±9.6
10249	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TOD	9.29	
10250	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)			±9.8
10251	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	9.81	±9.6
10252	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	10.17	±9.6
10253	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.24	19.8
10254	CAG		LTE-TDD	9.90	±9.6
10254	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	±9.6
		LTE-TDD (SC-FDMA, 50% RB, 15MHz, QPSK)	LTE-TDD	9.20	±9.6
10256	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 18-QAM)	LTE-TDD	9.96	19.6
10257	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 84-QAM)	LTE-TDD	10.08	+9.6
10258	CAG	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, CIPSK)	LTE-TDD	9.34	±9.6
10259	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	±9.6
10260	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	19.6
10261	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	±9.6
10262	CAH	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 16-QAM)	LTE-TDD	9.83	±9.6
10263	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	±9.6
10264	CAH	LTE-TDD (SC-FDMA, 100% RB, 5MHz, QPSK)	LTE-TDD	9.23	±9.6
10265	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	+9.6
10266	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 84-QAM)	LIE/TDD	10.07	±9.6
10267	CAH	LTE-TDD (SC-FDMA, 100% RB, 10MHz, QPSK)	LTE-TDD		
10268	CAG	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 16-QAM)		9.30	±9.6
10269	CAG	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 64-QAM)	LTE-TDD	10.06	±9.6
10270	CAG		LTE-TDD	10.13	±9.6
10274	CAC	LTE-TDD (SC-FDMA, 100% RB, 15MHz, QPSK)	LTE-TDD	9.58	±9.6
10274	CAC	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8 10)	WCDMA	4.87	±9.6
		UMTS-FDD (HSUPA, Subtest 5, 3GPP RelB.4)	WCDMA	3.96	±9.6
10277	CAA	PHS (QPSK)	PHS	11.81	±9.6
10278	CAA	PHS (QPSK, BW 884 MHz, Rolloff 0.5)	PHS	11.81	19.6
10279	CAA	PHS (QPSK, BW 884 MHz, Rolloff 0.38)	PHS	12.18	±9.6
10290	AAB	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	±9.6
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	±9.6
10292	AAB	CDMA2000, RC3, SC32, Full Rate	CDMA2000	3.39	19.6
10293	AAB	CDMA2000, RC3, SQ3, Full Rate	CDMA2000	3.50	+9.6
10295	AAB	COMA2000, RC1, SO3, 1/8th Rate 25 ir	CDMA2000	12.49	±9.6
10297	AAE	LTE-FDD (SC-FDMA, 50% RB, 20MHz, QPSK)	LTE-FDD	5.81	±9.6
10298	AAE	LTE-FDD (SC-FDMA, 50% RB, 3MHz, QPSK)	LTE-FDD	5.72	±9.6
10299	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	+9.6
10300	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)			
10301	AAA	IEEE 802.18e WIMAX (29:18, 5ms, 10 MHz, QPSK, PUSC)	LTE-FDD	6.60	±9.6
10301	AAA		WiMAX	12.03	±9.6
10302	AAA	IEEE 802 16e WIMAX (29:18, 5ms, 10 MHz, QPSK, PUSC, 3 CTRL symbols)	WiMAX	12.57	±9.6
		JEEE 802.16e WIMAX (31.15, 5 ms. 10 MHz. 64QAM, PUSC)	WMAX	12.52	±9.6
10304	AAA	IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, 84QAM, PUSC)	WMAX	11.86	±9.6
10305	AAA	IEEE 802.16s WIMAX (31.15, 10 ms, 10 MHz, 64QAM, PUSC, 15 symbols)	WiMAX	15.24	+9.6
	AAA	IEEE 802 16e WIMAX (29:18, 10 ms, 10 MHz, 64QAM, PUSC, 18 symbols)	WMAX	14.67	±9.6

Certificate No: EX-7509 Apr23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



Page: 24 of 72

EX3DV4 - SN:7509 April 26, 2023

UID 10307	AAA	Communication System Name	Group	PAR (dB)	UncE k =
10307	AAA	IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, QPSK, PUSC, 18 symbols)	WMAX	14.49	±9.6
_		IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 16QAM, PUSC)	WMAX	14.46	+9.6
10309	AAA	IEEE 802,16e WIMAX (29:18, 10 ms, 10 MHz, 16QAM, AMC 2x3, 18 symbols)	WMAX	14.58	±9.6
10310	AAA	IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, QPSK, AMC 2x3, 18 symbols)	WMAX	14.57	±9.6
10311	AAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	±9.6
0313	AAA	IDEN 1:3	IDEN	10.51	±9.6
10314	AAA	IDEN 1:6	IDEN	13.48	+9.6
10315	AAB	IEEE 802 11b WiFi 2 4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	WLAN	1.71	+9.6
10316	AAB	IEEE 802.11g WIFI 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	±9.6
10317	AAD	IEEE, 802.11a WiFi 5 GHz. (OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	±9.6
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	±9.6
10353	AAA	Pulse Waveform (200Hz, 20%)	Generio	6.99	±9.6
0354	AAA	Pulso Waveform (200Hz, 40%)	Generic	3.98	+9.6
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	
0356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	+9.6
10387	AAA	QPSK Waveform, 1 MHz	Generic		±9,6
0388	AAA	QPSK Waveform, 10 MHz	Generic	5.10	±9.6
0396	AAA	B4-QAM Waveform, 100 kHz		5.22	±9.6
0399	AAA	64-QAM Waveform, 40 MHz	Generic	8.27	+9.6
0400	AAE	IEEE 802.11ac WiFi (20 MHz, 64-QAM, 99pc duty cycle)	Generic	6.27	±9.6
0401	AAE	JEEE 802,11ac WiFi (40 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.37	±9.6
0402	AAE	IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.60	±9.6
0403	AAB	CDMA2000 (1xEV-DD, Rev. 0)	WLAN	8.53	±9.6
0404	AAB	CDMA2000 (1xEV-DO, Rev. 0) CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.76	+9.6
0406	AAB		CDMA2000	3.77	±9.6
0410		CDMA2000, RC3, SC32, SCH0, Full Rate	CDMA2000	5.22	±9.6
	AAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	LTE-TDD	7.82	±9.6
0414	AAA	WLAN CCDF, 64-QAM, 40 MHz	Generic	8.54	±9.6
0415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	WLAN	1.54	+9.6
0416	AAA	IEEE 802.11g WiFl 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
0417	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
0418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	WLAN	8.14	±9.6
0419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	WLAN	8.19	+9.6
0422	AAC	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	+9.6
0423	AAC	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	+9.6
0424	AAC	IEEE 802.11n (HT Greenfield, 72.2 Mbps. 64-QAM)	WLAN	8.40	±9.6
0425	AAC	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	
0426	AAC	IEEE 802.11n (HT Greenfield, 90 Mbps, 18-QAM)	WLAN	8.45	±9.6
0427	AAC	IEEE 802.11n (HT Greenfield, 150 Mbps. 64-QAM)	WLAN		19.6
0430	AAE	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	B.41	±9.6
0431	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.28	±9.6
0432	AAD	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)		8.38	±9.6
0433	AAD	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	19.6
0434	AAB	W-CDMA (BS Test Model 1, 64 DPCH)	LTE-FDD	8.34	#9.6
0.435	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	WCDMA	8.60	±9.6
0447	AAE	TE EDD (SCHOMA, THIS, 20MRZ, QFSK, UL SUDITAINS=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
0448	AAE	LTE-FDD (OFDMA, 5MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	±9.6
0449	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3,1, Clippin 44%)	LTE-FDD	7.53	=9.6
		LTE-FDD (OFDMA, 15MHz, E-TM 3.1, Cliping 44%)	LTE-FDD	7.51	±9.6
0.450	AAD	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Glipping 44%)	LTE-FDD	7.48	±9.6
0.451	AAB	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	±9.6
0453	AAE	Validation (Square, 10 ms, 1 ms)	Test	10.00	±9.6
0456	AAC	IEEE 802.11ac WiFi (160 MHz, 64-OAM, 99pc duty cycle)	WLAN	8.63	±9.6
0457	AAB	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	±9.6
0458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	±9.6
0459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	+9.6
0.460	AAB	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	+9.6
0461	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
0462	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2.3,4,7,8.9)	LTE-TDD	8.30	±9.6
0463	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	±9.6
0464	AAD	LTE-TDD (SC-FDMA: 1 RB, 3 MHz, QPSK, UL Subframe=2.3.4.7.8.9)	LTE-TDD	7.82	±9.6
0465	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe-2,3,4,7,8,9)	LTE-TDD	8.32	
0466	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subtrame-2,3,4,7,8,9)	LTE-TOD	8.32	+9.6
0.467	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)			±9.6
0468	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	7.82	±9.6
0.469	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subrame=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
0470	AAG	TE-TDD (SC EDMA + DR TOMBY OPEN III C STORAGE 2.3.4,7,8,9)	LTE-TDD	8.56	±9.6
0471	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3.4,7,8.9)	LTE-TOD	7.82	+9.6
	Salam.	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6

Certificate No: EX-7509_Apr23

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.



Page: 25 of 72

EX3DV4 - SN:7509 April 26, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10472	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2.3,4,7,8,9)	LTE-TOD	8.57	±9.6
10473	AAF	LTE-TDD (SC-FDMA, 1 RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10474	AAF	LTE-TDD (SC-FDMA, 1 RB, 15MHz, 16-QAM, UL Subframe=2.3.4.7,8,9)	LTE-TDD	8.32	+9.6
10475	AAF	LTE-TDD (SC-FDMA, 1 RB, 15MHz, 64-QAM, UL Subframe=2.3,4,7,8,8)	LTE-TOD		
10477	AAG	LTE-TDD (SC-FDMA, 1 RB, 20MHz, 16-QAM, UL Subframe 2.3.4.7,8,9)	LTE-TOD	8.57	±9.6
10478	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)		8.32	±9.6
10479	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10480	AAG	LTE TOD (SC FOMA 50% RB, 1.4 MHz, QPSR, UL Subtrame+2,3,4,7,8,9)	LTE-TOD	7.74	±9,6
		LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subtrame=2,3,4,7,8.9)	LTE-TOD	8.18	+9.6
10481	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	+9.6
10482	AAD	LTE-TDD (SC-FDMA, 50% RB, 3MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.71	±9.6
10483	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.39	±9.6
10484	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.47	±9.6
10485	AAG	LTE-TDD (SC-FDMA, 50% RB, 5MHz, QPSK, UL Subframe=2.3,4,7,8,9)	LTE-TOD	7.59	+9.6
10486	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.38	
10487	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)			±9.6
10488	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2.3.4.7,8.9)	LTE-TOD	8 60	±9.6
10489	AAG	LTE TOD (SC-FOMA, 50% NB, 10 MHZ, QPSK, UL Subtrame=2,3,4,7,8,9)	LTE-TDD	7.70	±9.6
		LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.31	±9.6
10490	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subtrame=2,3.4,7.8,9)	LTE-TDD	8.54	±9.6
10491	AAF	LTE-TDD (SC-FDMA, 50% RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	+9.6
10492	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe 2,3,4,7.8,9)	LTE-TDD	8.41	±9.6
10493	AAF	LTE-TDD (SG-FDMA, 50% RB, 15MHz, 64-QAM, UL Subframe 2,3,4,7,8.9)	LTE-TDD	8.55	±9.6
10494	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2.3,4,7,8,9)	LTE-TOD	7.74	
10495	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)			±9.6
10496	AAG	LTE-TOD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.37	±9.6
10497	AAC	TE TDD (SG-FDMA, 50% RB, 20 MHZ, 84-QAM, UL Subtrame=2,3,4,7,8,9)	LTE-TOD	B.54	€9.6
10498	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TOD	7.67	±9.6
		LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, 16-QAM, UL Subframe=2,3,4,7.8,9)	LTE-TDD	8.40	±9.6
10499	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.68	±9.6
10500	AAD	LTE-TDD (SC-FDMA, 100% RB, 3MHz, QPSK, UL Subframe=2.3,4.7,8,9)	LTE-TDD	7.67	±9.6
10501	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	B.44	±9.6
10502	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.52	
10503	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8.9)	LTE-TOD		±9.6
10504	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)		7.72	±9,6
10505	AAG	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	±9.6
10505	AAG	TE TDD (SG-FDMA, 100% RB, 5 MHz, 84-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.54	+9.6
		LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	+9.6
10507	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.36	±9.6
10508	AAG	LTE-TDD (SC-FDMA, 100% RB, 10MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	±9.6
10509	AAF	LTE-TDD (SC-FDMA, 100% RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.99	±9.6
10510	AAF	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.49	+9.6
10511	AAF	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.51	±9.6
10512	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TOD	7.74	
10513	AAG	LTE-TDD (SC-FDMA, 100% RB. 20 MHz, 16-QAM, UL Subtrame=2,3,4,7,8,9)			±9.6
10514	AAG	LTE TOD ISC COMA, 100% RB, 20 MHz, 16-QAM, UL Subtrame=2,3,4,7,8,9	LTE-TDD	8.42	±9.6
10515		LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe-2.3,4,7.8.9)	LTE-TOD	8 45	+9.6
	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	WLAN	1.58	+9.6
10516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	WLAN	1.57	±9.6
10517	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	WLAN	1.58	±9.6
10518	AAG	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10519	AAC	IEEE 802.11a/h WiFl 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.39	19.6
10520	AAC	IEEE 802.11a/h WIFI 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.12	
10521	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duly cycle)	WLAN		+9.6
10522	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM: 24 Mbps, 99pc duty cycle)		7.97	±9.6
10523	AAC	IEEE DOS 11-A WIELE CHA (OFPA), 18MP- OF A ASSESSMENT	WLAN	8.45	±9.6
		IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.08	±9.6
10524	AAC	IEEE 802 11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.27	19.6
10525	AAC	IEEE 802 11ac WiFi (20 MHz, MCS0, 99pc duty cycle)	WLAN	8.36	±9.6
10526	AAC	JEEE 802,11ac WiFi (20 MHz, MCS1, 99pc duty cycle)	WLAN	8.42	±9.6
10527	AAC	IEEE 802.11ac WiFi (20 MHz, MCS2, 99pc duty cycle)	WLAN	8.21	19.6
10528	AAC:	IEEE 802 11ac WiFi (20 MHz, MCS3, 99pc duly cycle)	WLAN	8.36	+9.6
10529	AAC	IEEE 802 11ac WiFi (20 MHz, MCS4, 99pc duty cycle)	WLAN		
10531	AAG	IEEE 802.11ac WiFi (20 MHz, MCS6, 99pc duty cycle)		8.36	±9,6
10532	AAC	IEEE 802.11ac WiFi (20 MHz, MCS7, 99pc duty cycle)	WLAN	8.43	±9.6
10533	AAC	IEEE 002 11 MEE (20 ME) 120 ME 14000 2000 1	WLAN	8.29	±9.6
		IEEE 802 11ac WiFi (20 MHz, MCS8, 99pc duty cycle)	WLAN	8.38	+9.6
10534	AAC	IEEE 802 11 sc WiFi (40 MHz, MCS0, 99pc duty cycle)	WLAN	8.45	+9.8
10535	AAC	IEEE 802.11m; WiFI (40 MHz, MCS1, 99pc duty cycle)	WLAN	8.45	+9.6
10536	AAC	IEEE 802.11ac WiFi (40 MHz, MCS2, 99pc duty cycle)	WLAN	8.32	±9.6
10537	AAC	JEEE 802 11ac WiFi (40 MHz, MCS3, 99pc duty cycle)	WLAN	8.44	±9.6
10538	AAC	IEEE 802.11ac WiFi (40 MHz, MCS4, 99pc duty cycle)	WLAN	8.54	
10540	AAC	IEEE 802.11ac WiFi (40 MHz, MCS6, 99pc duty cycle)			±9.6
	2010	mana available tria ((40 mine, microb, dape duty cycle)	WLAN	8.39	+9.6

Certificate No: EX-7509_Apr23

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.



Page: 26 of 72

EX3DV4 - SN:7509 April 26, 2023

UID 10541	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10541	AAC	IEEE 802.11ac WiFi (40 MHz, MCS7, 99pc duty cycle)	WLAN	8.46	±9.6
10543		IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc duty cycle)	WLAN	8.65	±9.6
0544	AAC	IEEE 802.11ac WIFI (40 MHz, MCS9, 99pc duty cycle)	WLAN	8.65	+9.6
0545	AAC	IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle)	WLAN	8.47	±9.6
0546	AAC	IEEE 802,11ac WiFi (80 MHz, MCS1, 99pc duty cycle)	WLAN	8.55	±9.6
0547	AAC	IEEE 802.11ac WiFi (80 MHz, MCS2, 99pc duty cycle)	WLAN	8.35	±9.6
0548	AAC	IEEE 802.11ac WiFi (80 MHz, MCS3, 99pc duty cycle)	WLAN	8.49	+9.6
0550	AAC	IEEE 802.11ac WiFi (80 MHz, MCS4, 99pc duty cycle) IEEE 802.11ac WiFi (80 MHz, MCS6, 99pc duty cycle)	WLAN	8.37	±9.6
0551	AAC	IEEE 802.1186 WIFI (80 MHZ, MGSB, 99pc duty cycle)	WLAN	8.38	±9.6
10552	AAC	IEEE 802.11ac WiFI (80 MHz, MCS7, 99pc duty cycle) IEEE 802.11ac WiFI (80 MHz, MCS8, 99pc duty cycle)	WLAN	B.50	±9.6
0553	AAC	IEEE 802.11ac WIFI (80 MHz, MCS8, 99pc duty cycle)	WLAN	8,42	±9.6
0554	AAD	IEEE 802,11ac WiFi (160 MHz, MCSO, 99pc duty cycle)	WLAN	8.45	±9.6
0555	AAD	IEEE 802,11ac WiFi (160 MHz, MCS1, 99pc duty cycle)	WLAN	8.48	±9.6
0556	AAD	IEEE 802.11ac WiFi (160 MHz, MCS2, 99pc duty cycle)	WLAN	8.47	+9.6
0557	AAD	IEEE 802.11ac WiFi (160 MHz, MCS3, 99pc duty cycle)	WLAN	8.50	±9,6
0558	AAD	IEEE 802 11ac WiFi (160 MHz, MCS4, 99pc duty cycle)	WLAN	8.52	±9.6
0560	AAD	IEEE 802.11ac WiFi (160 MHz, MCS6, 99pc duty cycle)	WLAN	8.61	±9.6
0561	AAD	IEEE 802.11ac WiFi (160 MHz, MCS7, 99pc duty cycle)	WLAN	8.73	+9.6
0562	AAD	IEEE 802.11ac WiFi (160 MHz, MCS8, 99pc duty cycle)	WLAN	8.56	19.6
0563	AAD	IEEE 802.11ac WIFI (160 MHz, MCS9, 99pc duty cycle)	WLAN	8.69	±9.6
0564	AAA	IEEE 802 11g WiFi 2 4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.77	±9.6
0565	AAA	IEEE 802 11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.25	±9.6
0566	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.45	±9.6
0567	AAA	IEEE 802,11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	WLAN	6.13	+9.6
0588	AAA	IEEE 802,11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.00	±9,6
0569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty bycle)	WLAN	8.37	±9.6
0570	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps. 99pc duty cycle)	WLAN	8.10	±9.6
0571	AAA	IEEE 802.11h WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	WLAN	1.99	±9.6
0572	AAA	IEEE 802,11b WiFl 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	WLAN	1.99	19.6
0573	AAA	IEEE 802,11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	WLAN	1.99	±9.6
0574	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90oc duty cycle)	WLAN	1.98	±9.6 ±9.6
0575	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	19.6
0576	AAA.	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	WLAN	B.60	±9.6
0577	AAA	IEEE 802,11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6
0578	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	+9.6
0579	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	+9.6
0580	AAA	IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±9.6
0581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±9.6
0582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±9.6
0583	AAC	IEEE 802.11a/h WiFi 5 GHz (DFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	19.6
0584	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	+9.6
0585	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6
0586	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	±9.6
0587	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	+9.6
0588	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	=9.6
0589	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	≥9.6
0590	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±9.6
0591	AAC	IEEE 802.11n (HT Mixed, 20 MHz. MCS0, 90pc duty cycle)	WLAN	8.63	±9.6
0592	AAG	IEEE 802.11π (HT Mixed, 20 MHz, MCS1, 90pc duty cycle)	WLAN	8.79	+9.6
0593	AAC	IEEE 802,11n (HT Mixed, 20 MHz, MCS2, 90pc duty cycle)	WLAN	8.64	19.6
0594	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle)	WLAN	8.74	±9.6
		IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 90pc duty cycle)	WLAN	8.74	±9.6
0596	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc duty cycle)	WLAN	8.71	±9.6
0598	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 90pc duty cycle)	WLAN	8.72	±9.6
0598	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc duty cycle)	WLAN	8.50	+9.6
0600	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc duty cycle)	WLAN	8.79	±9.6
0600	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc duty cycle)	WLAN	8.88	±9.6
0602	AAG	IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc duty cycle)	WLAN	6.82	+9.6
0603	AAC	IEEE 802.11ri (HT Mixed, 40 MHz, MCS3, 90pc duty cycle)	WLAN	8.94	±9.6
0604	AAC	IEEE 802.11v (HT Mixed, 40 MHz, MCS4, 90pc duty cycle)	WLAN	9.03	±9.6
0605	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle)	WLAN	8.76	±9.6
0606	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc duty cycle) IEEE 802.11n (HT Mixed, 40 MHz, MCS7, 90pc duty cycle)	WLAN	8.97	±9.6
0607	AAC	IEEE 802.11n (H1 Mixed, 40 MHz, MCS7, 90pc duty cycle) IEEE 802.11nc WiFi (20 MHz, MCS0, 90pc duty cycle)	WLAN	8.82	±9.6
0608	AAC	IEEE 802.11ac WIFI (20 MHz, MCS0, 90pc duty cycle)	WLAN	8.64	+9.6
- 400	-10.00	The state of the s	WLAN	8.77	±9.6

Certificate No: EX-7509_Apr23

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.

f (886-2) 2298-0488



Page: 27 of 72

EX3DV4 - SN:7509

April 26, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
10609	AAC	IEEE 802,11ac WiFi (20 MHz, MCS2, 90pc duty cycle)	WLAN	8.57	±9.6
0610	AAC	IEEE 802.11ac WiFi (20 MHz, MCS3, 90pc duty cycle)	WLAN	8.78	+9.6
10611	AAC	IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc duty cycle)	WLAN	8.70	±9.6
10612	AAC	IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6
10613	AAC	IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc duty cycle)	WLAN	8.94	±9.6
10614	AAC	IEEE 802.11ac WiFi (20 MHz, MGS7, 90pc duty cycle)	WLAN	8.59	+9.6
10615	AAC	IEEE 802.11ac WiFi (20 MHz, MCS8, 90pc duty cycle)	WLAN	8.82	±9.6
10616	AAC	IEEE 802.11ac WiFi (40 MHz, MCS0, 90pc duty cycle)	WLAN	8.82	±9.6
10617	AAC	IEEE 802,11ac WiFi (40 MHz, MCS1, 90pc duty cycle)	WLAN	8.81	±9.6
10618	AAC	IEEE 802.11ac WiFi (40 MHz, MCS2, 90pc duty cycle)	WLAN	8.58	+9.6
10619	AAC	IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc duty cycle)	WLAN	8.86	19.6
10620	AAC	IEEE 802.11ac WIFI (40 MHz, MCS4, 90pc duty cycle)	WLAN	8.87	+9.6
10821	AAC	IEEE 802 11ac WiFi (40 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6
10622	AAC	IEEE 802.11ac WiFi (40 MHz, MCS6, 90pc duty cycle)	WLAN	8.68	±9.6
10623	AAC	JEEE 802 11ac WiFi (40 MHz, MCS7, 90pc duty cycle)	WLAN	8.82	±9.6
10624	AAC	IEEE 802.11ac WiFi (40 MHz, MCS8, 90pc duty cycle)	WLAN	8.96	±9.6
10625	AAC	IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc duty cycle)	WLAN	8.96	±9.6
10626	AAC	IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc duty cycle)	WLAN	8.83	±9.6
10627	AAC	JEEE 802.11ac WiFi (80 MHz, MCS1, 90pc duty cycle)	WLAN	8.88	
10628	AAC	IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc duty cycle)	WLAN	8.71	±9.6
10629	AAC	IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc duty cycle)	WLAN		±9.6
10630	AAC	IEEE 802.11 ac WiFi (80 MHz. MCS4, 90pc duty cycle)	WLAN	8.85	±9,6
10631	AAC	IEEE 802 11ac WiFi (80 MHz. MCS5, 90pc duty cycle)		8.72	±9.6
10632	AAC	IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc duty cycle)	WLAN	8.81	±9.6
10633	AAC	IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc duty cycle)	WLAN	8.74	±9.6
10634	AAC	IEEE 802 11ac WiFi (80 MHz, MCS8, 90pc duty cycle)	WLAN	8.83	±9.6
10635	AAC	IEEE 802 11ac WIFI (80 MHz, MCS9, 90pc duty cycle)	WLAN	8.80	±9.8
10636	AAD	JEEE 802.11ac WiFi (160 MHz, MCS0, 90pc duty cycle)	WLAN	8.81	+9.6
10637	AAD	IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc duly cycle)	WLAN	8.83	±9.6
10638	AAD	IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc duty cycle)	WLAN	8.79	±9.6
10639	AAD	IEEE 802 1180 WIFT (160 MHz, MCS2, 90pc duty cycle)	WLAN	8.86	±9.6
10640	AAD	IEEE 802.11ac WIFI (160 MHz, MCS3, 90pc duty cycle)	WLAN	8.85	+9.6
10641	AAD	IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc duty cycle)	WLAN	8.98	±9.6
10642	AAD	IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc duty cycle)	WLAN	9.06	±9.6
10643	AAD	IEEE 802.11ac WiFi (160 MHz, MCS6, 90pc duty cycle)	WLAN	9.06	±9.6
10644	AAD	IEEE 802 11ac WiFi (160 MHz, MCS7, 90pc duty cycle)	WLAN	8.89	+9.6
10645	AAD	IEEE 802 11ac WiFi (160 MHz, MCS8, 90pc duty cycle)	WLAN	9.05	±9.6
		IEEE 802.11ac WIFi (160 MHz, MCS9, 90pc duty cycle)	WLAN	9.11	±9.6
10646	AAH	LTE-TDD (SC-FDMA, 1 RB, 5MHz, QPSK, UL Subframe=2,7)	LTE-TOD	11.96	+9.6
10648	AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	±9.6
		CDMA2000 (1x Advanced)	CDMA2000	3.45	±9.6
10652	AAF	LTE-TDD (OFDMA, 5MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	±9.6
10653	AAF	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	±9.6
10654	AAE	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	±9.6
10655	AAF	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TOD	7.21	+9.6
10658	AAB	Pulse Waveform (200Hz, 10%)	Test	10.00	+9.6
10659	AAB	Pulse Waveform (200Hz, 20%)	Test	6.99	±9.6
10660	AAB	Pulse Wavelorm (200Hz, 40%)	Test	3.98	±9.6
10861	AAB	Pulse Waveform (200Hz, 60%)	Test	2.22	±9.6
10662	AAB	Pulse Waveform (200Hz, 80%)	Test	0.97	+9.6
10670	AAA	Bluetooth Low Energy	Bluetooth	2.19	±9.6
10671	AAC	IEEE 802.11ax (20 MHz, MCS0, 90pc duty cycle)	WLAN	9.09	±9.6
10672	AAC	IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle)	WLAN	8.57	±9.6
10673	AAC	IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle)	WLAN	8.78	±9.6
0674	AAC	IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle)	WLAN	8.74	19.6
0675	AAG	IEEE 802 1 tax (20 MHz, MCS4, 90pc duty cycle)	WLAN	8.90	+9.6
10676	AAC	IEEE 802.11 ax (20 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6
0677	AAC	IEEE 802.11 ax (20 MHz, MCS6, 90pc duty cycle)	WLAN	8.73	±9.6
0678	AAC	IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle)	WLAN	8.78	19.6
0679	AAC	IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle)	WLAN	8.89	29.6
0880	AAC	IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle)	WLAN	8.80	
10681	AAC	IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle)	WLAN	8.62	±9.6
10682	AAC	IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle)	WLAN	8.62	
10683	AAC	IEEE 802.11ax (20 MHz, MCS0, 99pc duty cycle)	WLAN		±9.6
0684	AAC	IEEE B02.11ax (20 MHz, MCS1, 99pc duly cycle)		B.42	+9.6
10685	AAC	IEEE B02.11ax (20 MHz, MGS2, 99pc duty cycle)	WLAN	8.26	±9.6
10686	AAC	IEEE 802.11ax (20 MHz, MCS3, 99pc duty cycle)	WLAN	8.33	±9.6
	1,10754	make over two less wire; words, sape duty cycle)	WLAN	8.28	±9.6

Certificate No: EX-7509_Apr23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 28 of 72

EX3DV4 - SN:7509 April 26, 2023

10687	Rev	Communication System Name	Group	PAR (dB)	UncE k =
	AAC	IEEE 802.11ax (20 MHz, MCS4, 99po duty cycle)	WLAN	B.45	+9.6
10688	AAC	IEEE 802.11ax (20 MHz, MCS5, 99pc duty cycle)	WLAN	8.29	±9.6
10689	AAC	IEEE 802.11ax (20 MHz, MCS6, 99pc duty cycle)	WLAN		
10690	AAC	IEEE 802.11ax (20 MHz, MCS7, 99pc duty cycle)	WLAN	8.55	±9,6
10691	AAC	IEEE 802,11ax (20 MHz, MGS8, 99pc duty cycle)		8.29	±9.6
10692	AAC	IEEE 802.11ax (20 MHz, MCS9, 99pc duty cycle)	WLAN	8.25	+9.6
10693	AAC	TEEC BOOL 1 Tax (20 MITZ, MCS9, 99DC Bufy cycle)	WLAN	8.29	+9.6
		IEEE 802.11ax (20 MHz, MCS10, 99pc duty cycle)	WLAN	8.25	±9.6
10694	AAC	IEEE 802.11ax (20 MHz, MCS11, 99pc duty cycle)	WLAN	8.57	±9.6
10695	AAC	IEEE 802.11ax (40 MHz, MCS0, 90pc duty cycle)	WLAN	8.78	±9.6
10696	AAC	IEEE 802.11ax (40 MHz, MCS1, 90pc duty cycle)	WLAN	8.91	
10697	AAC	IEEE 802.11ax (40 MHz, MCS2, 90pc duty cycle)	WLAN		+9.6
10698	AAC	IEEE 802.11ax (40 MHz, MCS3, 90pc duty cycle)		8.61	+9.6
10699	AAC	IEEE 802.11ax (40 MHz, MCS4, 90po duty cycle)	WLAN	8.89	±9.6
10700	AAC	IEEE 802.11ax (40 MHz, MCS5, 90pc duty cycle)	WLAN	8.82	±9.6
10701	AAC	IEEE 002.11ax (40 MHz, MCS5, 90pc duty cycle)	WLAN	8.73	±9.6
		IEEE 802.11ax (40 MHz, MCS6, 90pc duty cycle)	WLAN	8.86	±9.6
10702	AAC	IEEE 802.11ax (40 MHz, MCS7, 90pc duty cycle)	WLAN	8.70	+9.6
10703	AAC	IEEE 802.11 ax (40 MHz, MGS8, 90pc duty cycle)	WLAN	8.82	±9.6
10704	AAC	IEEE 802,11ax (40 MHz, MCS9, 90pc duty cycle)	WLAN	8.56	
0705	AAC	IEEE 802.11ax (40 MHz, MCS10, 90pc duty cycle)	WLAN		±9.6
10706	AAC	IEEE 802.11ax (40 MHz, MCS11, 90pc duty cycle)	The second secon	8.69	19.6
0707	AAC	IEEE 802.11ax (40 MHz, MCS0, 99pc duty cycle)	WLAN	8.66	±9.6
0708	AAC	IEEE ROOM TON (40 MRTZ, MICSU, 99DC duty cycle)	WLAN	8.32	±9.6
		IEEE 802.11ax (40 MHz, MCS1, 99pc duty cycle)	WLAN	8.55	±9.6
0709	AAC	IEEE 802.11ax (40 MHz, MCS2, 99pc duty cycle)	WLAN	8.33	±9.6
0710	AAC	IEEE 802 11ax (40 MHz, MCS3, 99pc duty cycle)	WLAN	8.29	+9.6
0711	AAC	IEEE 802.11ax (40 MHz, MCS4, 99pc duty cycle)	WLAN	8.39	±9.6
10712	AAC	IEEE 802.11ax (40 MHz, MCS5, 99pc duty cycle)	WLAN	8.67	
0713	AAC	IEEE 802 11sx (40 MHz, MCS6, 99pc duty cycle)			+9.6
0714	AAC	IEEE 802.11ax (40 MHz, MCS7, 99pc duty cycle)	WLAN	8.33	±9.6
0715	AAC	IEEE DOO STAN (40 MP to MCGF, SSpit GUTY CYCIE)	WLAN	8.26	±9.6
		JEEE 802 11ax (40 MHz, MCS8, 99pc duty cycle)	WLAN	8.45	±9.6
0716	AAC	IEEE 802 11ax (40 MHz, MCS9, 99pc duty cycle)	WLAN	6.30	+9.6
10717	AAC	IEEE 802.11ax (40 MHz, MCS10, 99pc duty cycle)	WLAN	8.48	±9.6
10718	AAC	IEEE 802.11ax (40 MHz, MCS11, 99pc duty cycle)	WLAN	8.24	±9.6
10719	AAC	IEEE 802.11ax (80 MHz, MCS0, 90pc duty cycle)	WLAN	8.81	
0720	AAC	IEEE 802.11ax (80 MHz, MCS1, 90pc duty cycle)	WLAN		£9.6
10721	AAC	IEEE 802 11ax (80 MHz, MCS2, 90pc duty cycle)		8.87	+9.6
10722	AAC	NEEE 800 11 av (00 Mile MOCO 00 and 1 av 10)	WLAN	8.76	±9.6
10723	AAC	BEEE 802.11ax (80 MHz, MCS3, 90pc duty cycle)	WLAN	8.55	±9.6
		IEEE 802.11ax (80 MHz, MCS4, 90pc duty cycle)	WLAN	8.70	±9.6
10724	AAC	IEEE 802.11ax (80 MHz, MCS5, 90pc duty cycle)	WLAN	8.90	+9.6
10725	AAC	IEEE 802.11ax (80 MHz, MCS6, 90pc duty cycle)	WLAN	8.74	±9.6
10726	AAC	IEEE 802.11ax (80 MHz, MCS7, 90pc duty cycle)	WLAN	8.72	±9.6
10727	AAC	IEEE 802.11ax (80 MHz, MCS8, 90pc duty cycle)	WLAN		
10728	AAC	IEEE 802.11ex (80 MHz, MCS9, 90pc duty cycle)		8.66	19.6
10729	AAC	IEEE 802.11ax (80 MHz, MCS10, 90pc duty cycle)	WLAN	8.65	+9.6
0730	AAC	IEEE 802.118X (80 MHz, MCS10, Supc duty cycle)	WLAN	8.64	±9.6
		IEEE 802.11ax (80 MHz, MCS11, 90pc duty cycle)	WLAN	8.67	±9.6
0731	AAC	IEEE 802.11ax (80 MHz, MCS0, 99pc duty cycle)	WLAN	8.42	±9.6
0.732	AAC	IEEE 802 11ax (80 MHz, MCS1, 99pc duty cycle)	WLAN	8.46	+9.6
0733	AAG	IEEE 802.11ax (80 MHz, MCS2, 99pc duty cycle)	WLAN	8.40	+9.6
0734	AAC	IEEE 802.11ax (80 MHz, MCS3, 99pc duty cycle)	WLAN	8.25	±9.6
0735	AAC	IEEE 802.11 Bx (80 MHz, MCS4, 99pc duty cycle)	WLAN		
0736	AAC	IEEE 802.11ax (80 MHz, MCS5, 99pc duty cycle)		8.33	±9.6
0737	AAC		WLAN	8.27	±9.6
0738	AAC	IEEE 802 11ax (80 MHz, MCS6, 99pc duty cycle)	WLAN	8.36	19.6
		IEEE 802.11ax (80 MHz, MCS7, 99pc duty cycle)	WLAN	8.42	+9.6
0739	AAC	IEEE B02.11ax (80 MHz, MCS8, 99pc duty cycle)	WLAN	8.29	±9.6
0740	AAG	IEEE 802.11ax (80 MHz, MCS9, 99pc duty cycle)	WLAN	8.48	±9.6
0741	AAC	IEEE 802 11ax (80 MHz, MCS10, 99pc duty cycle)	WLAN	8.40	19.6
0742	AAC	IEEE 802.11ax (80 MHz, MCS11, 99pc duty cycle)	WLAN	8.43	
0743	AAC	IEEE 802.11ax (160 MHz, MCS0, 90pc duty cycle)			+9.6
0744	AAC	IEEE 802.11ax (160 MHz, MCS1, 90pc duty cycle)	WLAN	8.94	±9.6
0745	AAC	IEEE DOS 11- (150 MITZ, MICS), SUPC GUTY CYCIB)	WLAN	9.16	±9.6
		IEEE 802 11ax (160 MHz, MCS2, 90pc duty cycle)	WLAN	8.93	±9.6
0746	AAC	IEEE 802.11ax (160 MHz, MCS3, 90pc duly cycle)	WLAN	9.11	+9.6
0747	AAC	IEEE 802.11ax (160 MHz, MCS4, 90pc duty cycle)	WLAN	9.04	+9.6
0748	AAC	IEEE 802.11ax (160 MHz, MCS5, 90pc duty cycle)	WLAN	8.93	±9.6
0749	AAC	IEEE 802.11ax (160 MHz, MCS6, 90pc duty cycle)	WLAN	0.00	
0750	AAC	IEEE 802.11ax (160 MHz, MCS7, 90pc duty cycle)		6.90	±9.6
0.751	AAC	IEEE 802.11ax (160 MHz, MCS8, 90pc duty cycle)	WLAN	8.79	±9.6
0752	AAC	IEEE DOO LLOW (100 ARIA MODO GO	WLAN	8.82	+9.6
	PARTY.	IEEE 802.11ax (180 MHz, MCS9, 90pc duty cycle)	WLAN	8.81	±9.6

Certificate No: EX-7509_Apr23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



Page: 29 of 72

EX3DV4 - SN:7509 April 26, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
10753	AAC	IEEE 802.11ax (160 MHz, MCS10, 90pc duty cycle)	WLAN	9.00	€9.6
0754	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	8.94	+9.6
0755	AAC	IEEE 802.11ax (150 MHz, MCS0, 99pc duty cycle)	WLAN	8.64	
0756	AAC	IEEE 802.11ax (180 MHz, MCS1, 99pc duty cycle)	WLAN		±9.6
0757	AAC	IEEE 802.11ax (160 MHz, MCS2, 99pc duty cycle)		8.77	±9.6
0758	AAC	IEEE 802.11ax (160 MHz, MCS2, 99pc duty cycle)	WLAN	8.77	±9.6
0759	AAC	TEEL BOOK 11 AX (160 MITZ, MICSS, 99DC DUTY CYCIE)	WLAN	8.69	±9.6
		IEEE 802.11ax (160 MHz, MCS4, 99pc duty cycle)	WLAN	8.58	+9.8
0760	AAC	IEEE 802.11ax (160 MHz, MCS5, 99pc duty cycle)	WLAN	8.49	±9.6
0761	AAC	IEEE 802 11ax (160 MHz, MCS6, 99pc duty cycle)	WLAN	8.58	±9.6
0762	AAC	IEEE 802.11ax (160 MHz, MCS7, 99pc duty cycle)	WLAN	8.49	196
0763	AAC	IEEE 802.11ax (160 MHz, MGS8, 99pc duty cycle)	WLAN	8.53	19.6
0764	AAC	IEEE 802 11 ax (160 MHz, MCS9, 99pc duty cycle)	WLAN	8.54	
0765	AAC	IEEE 802.11ax (160 MHz, MGS10, 99pc duty cycle)	WLAN		±9.6
0766	AAC	IEEE 802 11ax (160 MHz, MCS11, 99pc duty cycle)		8.54	±9.6
0767	AAE	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15kHz)	WLAN	8.51	±9.6
0768	AAD	SC ND (CP-OFDM, 1 RB, 5 MHZ, CPSK, 15 KHZ)	5G NR FR1 TDD	7.99	+9.6
		5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	19.6
0769	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	±9.6
0770	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15kHz)	5G NR FR1 TDD	8.02	±9.6
0771	AAD	5G NR (CP-DFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FRI TDD	8.02	19.6
0772	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.23	
0773	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD		19.6
0774	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)		8.03	±9.6
0775	AAD		5G NR FR1 TDD	8.02	±9.6
0776		5G NR (CP-OFDM, 50% RB, 5MHz, QPSK, 15kHz)	5G NR FR1 TDD	8.31	±9.6
	AAD	5G NR (CP-OFDM, 50% RB, 10 MHz, OPSK, 15 kHz)	5G NR FR1 TDD	8.30	19.6
D777	AAC	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	+9.6
0778	AAD	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.34	+9.6
0779	AAC	5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.42	±9.6
0780	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15kHz)	5G NR FR1 TDD	8.38	
0781	AAD	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	±9.6
0782	AAD	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)			19.6
0783	AAE	5G NR (CP-CFDM, 100% RB, 5MHz, QPSK, 15kHz)	5G NR FR1 TDD	8.43	+9.6
0784	AAD	50 NR (CP-UPDM, 100% RB, 5 MRZ, QPSK, 15 KRZ)	5G NR FR1 TDD	8.31	±9.6
		5G NR (CP-OFDM, 100% RB. 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.29	±9.6
0785	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.40	+9.6
0786	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.35	19.6
0787	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.44	±9.6
0788	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15kHz)	5G NR FR1 TDD	8.39	±9.6
0789	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.37	+9.6
0.790	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	
0791	AAE	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)			+9.6
0792	AAD	5G NR (CP-OFDM, 1 RB, 10MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.83	±9.6
0793	AAD	SO VIR (CP-OPDM, 1 HB, 10 MHz, QPSK, 30 KHz)	5G NR FR1 TDD	7.92	±9.6
		5G NR (CP-OFDM, 1 RB, 15MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.95	19.6
0794	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	±9.6
0.795	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.84	+9.6
0796	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	19.6
0797	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.01	+9.6
0798	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD		
0.799	AAD	5G NR (CP-OFDM, 1 RB, 60 MHz, OPSK, 30 kHz)		7.89	+96
0801	AAD	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	+9.6
0802	AAD		5G NR FR1 TDD	7.89	±9.6
		5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.87	±9.6
0803	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	19.6
0805	AAD	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	19.6
0806	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.37	±9.6
0809	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6
0810	AAD	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6
0812	AAD	5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	
0817	AAE	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)			19.6
0818	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	19.6
0819	AAD		5G NR FR1 TDD	B.34	19.6
		5G NR (CP-OFDM, 100% RB, 15MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.33	±9.6
0820	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.30	+9.6
0821	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	B.41	19.6
0822	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	19.6
0823	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FRI TDD	8.38	±9.6
0824	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.39	
0825	AAD	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)			±9.6
0827	AAD	5G NR (GP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.6
0828			5G NR FR1 TDD	8.42	±9.6
	AAD	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.43	+9.6

Certificate No: EX-7509_Apr23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 30 of 72

EX3DV4 - SN:7509 April 26, 2023

10829	Rev	Communication System Name	Group	PAR (dB)	UncE k =
		5G NR (CP-OFDM, 100% RB, 100 MHz; QPSK, 30 kHz)	5G NR FRI 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	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.86	±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 FRI 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-QFDM, 50% RB, 15MHz, 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 FRI TDD	8.34	
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-QFDM, 100% RB, 10 MHz, QPSK, 60 kHz)			±9.6
0855	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±9.6
0856	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	±9,6
0857	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	±9.6
0858	AAD		5G NR FR1 TDD	8.35	#9.6
0859	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	±9.6
	AAD	5G NR (CP-CFDM, 100% RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±9.6
0880	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
10861		5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.40	19.6
0863	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 80 kHz)	5G NR FR1 TDD	8.41	±9.6
0864	AAD	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	±9.6
0865	AAD	5G NR (CP-OFDM, 100% RB. 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
0866	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0868	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz).	5G NR FR1 TDD	5.89	19.6
0869	AAE	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	±9.6
0870	AAE	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.86	±9.6
0871	AAE	5G NR (DFT:s-OFDM, 1 RB, 100 MHz; 16QAM, 120 kHz)	5G NR FR2 TOD	5.75	
0872	AAE	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.52	±9.6
10873	AAE	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	±9.6
10874	AAE	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD		19.6
0875	AAF	5G NR (CP-CFDM, 1 RB, 100 MHz, QPSK, 120 kHz)		6.65	±9.6
0876	AAE	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	±9.6
10877	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.39	±9.6
0878	AAE		5G NR FR2 TDD	7.95	+9.6
0879	AAE	SG NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.41	±9.6
		5G NR (CP-OFDM, 1 RB, 100MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.12	±9.6
0880	AAE	5G NR (CP-GFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.38	±9.6
10881	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	±9.6
0882	AAE	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.96	±9.8
0883	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.57	±9.6
0884	AAE	5G NR (DFT:s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.53	±9.6
0885	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	19.6
0886	AAE	5G NR (DFT:s-OFDM, 100% RB, 50 MHz, 64QAM, 120kHz)	5G NR FR2 TDD	6.65	19.6
0887	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	±9.6
0888	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.35	±9.6
0889	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, 16OAM, 120 kHz)	5G NR FR2 TDD	8.02	+9.6
0890	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.40	±9.6
0891	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TOD	8.13	±9.6
0892	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.41	
0897	AAC	SG NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD		±9.6
0898	AAB	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)		5.86	±9.6
0.899	AAB	5G NR (DFT-s-OFDM, 1 RB, 15MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	+9.6
0900	AAB	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	±9,6
0901	AAB	SC ND (DET - OFDIA) DD OF MIL ODOG 2011	5G NR FR1 TDD	5.68	±9.6
0901	AAB	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
		5G NR (DFT:s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0903	AAB	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FRI TDD	5.68	+9.6
0904	AAB	5G NR (DFTs-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9,6
0905	BAA	5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0906	AAB	5G NR (DFT s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0907	AAC	5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz)	5G NR FRI TDD	5.78	±9.6
80601	AAB	5G NR (DFT-t-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	19.6
oneo	AAB	5G NR (DFTs-OFDM, 50% RB. 15MHz, QPSK, 30kHz)	5G NR FR1 TDD	5.96	+9.6
0909					

Certificate No: EX-7509_Apr23

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.



Page: 31 of 72

EX3DV4 - SN:7509 April 26, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
10911	AAB	SG NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	±9.6
10912	AAB	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10913	AAB	5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
0914	AAB	5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.85	19.6
0915	AAB	5G NR (DFT-s-OFDM, 50% RB; 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	+9.6
0916	AAB	5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	±9.6
0917	AAB	5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94	
0918	AAC	5G NR (DFT-s-OFDM, 100% RB, 5MHz, QPSK, 30kHz)	5G NR FR1 TDD		±9.6
0919	AAB	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)		5.86	±9.6
0920	AAB	5G NR (DFFs-OFDM, 100% RB, 15MHz, QPSK, 30kHz)	5G NR FR1 TDD	5.86	+9.6
0921	AAB	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30kHz)	5G NR FR1 TDD	5.87	19.6
0922	AAB	5G NR (DFT-s-OFDM, 100% RB, 25MHz, QPSK, 30kHz)	5G NR FR1 TDD	5.84	±9.6
0923	AAB	5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FRI TOO	5.82	±9.6
0924	AAB		5G NR FR1 TDD	5.84	196
0925	AAB	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	19.6
		5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.95	49.6
0926	AAB	5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
0927	AAB	5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FRI TOD	5.94	±9.6
0928	AAC	5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	±9.6
0929	AAC	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	19.6
0930	AAC	5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	±9.6
0931	AAC	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
0932	AAC	5G NR (DFTs-OFDM, 1 RB, 25 MHz, OPSK, 15 kHz)	5G NR FR1 FDD	5.51	19.6
10933	AAC	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	19.6
0934	AAC	5G NR (DFT:s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD		
10935	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NA FR1 FDD	5.51	±9.6
0936	AAC	5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)			±9.6
0937	AAC	5G NR (DFT:s-OFDM, 50% RB, 10MHz, QPSK, 15kHz)	5G NR FR1 FDD	5.90	±9.6
10938	AAC	5G NR (DFT-s-OFDM, 50% RB, 15MHz, QPSK, 15kHz)	5G NR FR1 FDD	5.77	±9.6
0939	AAC	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	±9.6
0940	AAC	EG NR (DET - OFDM, 50% RB, 20MHZ, QPSK, 15 KHZ)	5G NR FR1 FDD	5.82	±9.6
10941		5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.89	±9.6
	AAC	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	±9.6
0942	AAC	5G NR (DFT:s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	19.6
10943	AAD	5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.95	+9.6
10944	AAC	5G NR (DFT-s-OFDM, 100% RB, 5MHz, QPSK, 15kHz)	5G NR FR1 FDD	5.81	±9.6
10945	AAC	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NA 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	AAC	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	#9.6
0948	AAC	5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	±9.6
10949	AAC	5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FD0	5.87	±9.6
10950	AAC	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	
10951	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.92	±9.6
10952	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.25	±9.6
10953	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)			±9.6
10954	AAA	5G NR DL (CP-OFDM, TM 3.1, 15MHz, 64-QAM, 15kHz)	5G NR FR1 FDD	8.15	±9.6
10955	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.23	±9.6
10956	AAA		5G NR FR1 FDD	8.42	±9.6
10957	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 84-QAM, 30 kHz)	5G NR FR1 FDD	8.14	+9.6
		5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.31	±9.6
10958	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.61	±9.6
10959	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.33	±9.6
10960	AAC	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, 15MHz, 64-QAM, 15kHz)	5G NR FR1 TDD	9.40	±9.6
0963	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.55	+9.6
0964	AAC	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
0966	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 84-QAM, 30 kHz)	5G NR FR1 TDD	9.55	±9.6
0967	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.42	
0968	AAB	5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz)			±9.6
0972	AAB	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15kHz)	5G NR FR1 TDD	9.49	±9.6
0973	AAB	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	11.59	+9.6
0974	AAB	EC NO (CO CEDAL LOSW DD LOSAWY, CES CANADO	5G NR FR1 TDD	9.06	±9.6
	AAA	5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz)	5G NR FR1 TDD	10.28	±9.6
0978		ULLA BOR	ULLA	1.16	±9.6
10979	AAA	ULLA HDR4	ULLA.	8.58	±9.6
10980	AAA	ULLA HDRB	ULLA	10.32	+9.5
0981	AAA	ULLA HDRp4	ULLA	3.19	+9.6
10982	AAA	ULLA HDRp8			

Certificate No: EX-7509_Apr23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



Page: 32 of 72

EX3DV4 - SN:7509

April 26, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10983	AAA	5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.31	
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	9.42	±9.6
10986	AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz)	5G NR FR1 TOD	9.54	+9.6
10987	AAA	5G NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.50	±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		±9.6
10990	AAA	5G NR DL (CP-OFDM, TM 3.1, 90 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.33	+9.6
11003	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.52	+9.6
11004	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	10.24	±9.6
11005	AAA	5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 15 kHz)		10.73	±9.6
11006	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.70	±9.6
11007	AAA	5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15kHz)	5G NR FR1 FDD	8.55	±9.6
11008	AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15kHz)	5G NR FR1 FDD	8.46	+9.6
11009	AAA	5G NR DL (GP-OFDM, TM 3.1, 25 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	B.51	±9.6
11010	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.76	±9,6
11011	AAA	5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.95	±9.6
11012	AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64 QAM, 30 kHz)	5G NR FR1 FDD	8.96	±9.6
11013	AAA	IEEE 802.11be (320 MHz, MCS1, 99pc duty cycle)	5G NR FR1 FDD	8.68	±9.6
11014	AAA	IEEE 802.11be (320 MHz, MCS2, 99pc duty cycle)	WLAN	8.47	±9.6
11015	AAA	IEEE 802.11be (320 MHz, MCS3, 99pc duty cycle)	WLAN	8.45	±9.6
11016	AAA	IEEE 802.11be (320 MHz, MCS4, 99pc duty cycle)	WLAN	8.44	±9.6
11017	AAA	IEEE 802.11be (320 MHz, MCS5, 99pc duty cycle)	WLAN	8.44	+9.6
11018	AAA	IEEE 802.11be (320 MHz, MCS6, 99pc duty cycle)	WLAN	8.41	±9.6
11019	AAA	IEEE 802.11be (320 MHz, MCS5, 99pc duty cycle)	WLAN	8.40	±9.6
11020	AAA	(EEE 802.1109 (320 MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6
11021	AAA	IEEE 802.11be (320 MHz, MCS8, 99pc duty cycle)	WLAN	8.27	±9.6
11022	AAA.	IEEE 802.11be (320 MHz, MCS9, 99pc duty cycle)	WLAN	8.46	+9.6
11022	AAA	IEEE 802.11be (320 MHz, MCS10, 99pc duty cycle)	WLAN	8.36	±9.6
11024	AAA	IEEE 802 11be (320 MHz, MCS11, 99pc duty cycle)	WLAN	8.09	±9.6
11024	AAA	IEEE 802.11be (320 MHz, MCS12, 99pc duty cycle)	WLAN	8.42	±9.6
11025	AAA	IEEE 802.11be (320 MHz. MCS13, 99pc duty cycle)	WLAN	8.37	+9.6
11026	MAA	IEEE 802.11be (320 MHz, MCS0, 99pc duty cycle)	WLAN	8.39	±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-7509_Apr23

Page 22 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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.



Page: 33 of 72

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





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

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

Accreditation No.: SCS 0108

SGS Taoyuan City

EUmm-9643_Aug23

CALIBRATION CERTIFICATE

Object

EUmmWV4 - SN:9643

QA CAL-02.v9, QA CAL-25.v8, QA CAL-42.v3

Calibration procedure for E-field probes optimized for close near field

evaluations in air

Calibration date

August 04, 2023

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3) °C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

12-Apr-23 (No. 0001A300692178)	Scheduled Calibration Apr-24
23-Jan-23 (No. 4030-315005314)	Jan-24
22-May-23 (No. EUmm-9374 May23)	May-24
13-Feb-23 (No. DAE4ip-1662 Feb23)	Feb-24
	23-Jan-23 (No. 4030-315005314) 22-May-23 (No. EUmm-9374_May23) 13-Feb-23 (No. DAE4ip-1662_Feb23)

Secondary Standards	ID	Check Date (in house)	Scheduled Check
Generator APSIN26G	SN: 669	28-Mar-17 (in house check May-23)	In house check: May-24
Generator Agilent E8251A	SN: US41140111	28-Mar-17 (in house check May-23)	In house check: May-24

Name Function Calibrated by Leff Klysner

Sven Kühn

Technical Manager

Issued: August 14, 2023

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: EUmm-9643_Aug23

Page 1 of 18

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 f (886-2) 2298-0488



Page: 34 of 72

Calibration Laboratory of Schmid & Partner Engineering AG





Service suisse d'étalonnage Servizio svizzero di taratura Swiss Calibration Service C

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

NORMx,y sensitivity in free space diode compression point crest factor (1/duty_cycle) of the RF signal

DCP CF A, B, C, D modulation dependent linearization parameters

 φ rotation around probe axis ϑ 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 Sensor Angles sensor deviation from the probe axis, used to calculate the field orientation and polarization is the wave propagation direction

Calibration is Performed According to the Following Standards:

a) IEEE Std 1309-2005, "IEEE Standard for calibration of electromagnetic field sensors and probes, excluding antennas, from 9 kHz to 40 GHz", December 2005

Methods Applied and Interpretation of Parameters:

- NORMx,y: Assessed for E-field polarization θ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). For frequencies > 6 GHz, the far field in front of waveguide horn antennas is measured for a set of frequencies in various
- waveguide bands up to 110 GHz.

 **DCPxy: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal. DCP does not depend on frequency nor media.

 Note: As the field is measured with a diode detector sensor, it is warrantied that the probe response is linear (E²) below the
- documented lowest calibrated value

- documented lowest calibrated value.

 PAR Is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics. The frequency sensor model parameters are determined prior to calibration based on a frequency sweep (sensor model involving resistors R, R_p, inductance L and capacitors C, C_p).

 ***Ax,y; Bx,y; Cx,y; Dx,y; VRx,y; 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.

 ***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).

 **Equivalent Sensor Angle: The two probe sensors are mounted in the same plane at different angles. The angles are assessed using the information gained by determining the NORMx (no uncertainty required).

 **Spherical isotropy (3D deviation from isotropy): in a locally homogeneous field realized using an open waveguide / horn setup.

Certificate No: EUmm-9643 Aug23

Page 2 of 18

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



Page: 35 of 72

EUmmWV4 - SN:9643 August 04, 2023

Parameters of Probe: EUmmWV4 - SN:9643

Basic Calibration Parameters

	Sensor X	Sensor Y	Unc (k = 2)
Norm (µV/(V/m) ²)	0.01953	0.02114	±10.1%
DCP (mV) B	106.0	105.0	±4.7%
Equivalent Sensor Angle	-59.7	35.6	

Calibration Results for Frequency Response (750 MHz - 110 GHz)

Frequency GHz	Target E-Field V/m	Deviation Sensor X dB	Deviation Sensor Y dB	Unc (k = 2)
0.75	77.2	-0.16	-0.13	±0.43
1.8	140.4	-0.01	-0.01	±0.43
2,0	133.0	0.12	0.16	±0.43
2.2	124.8	-0.06	-0.05	±0.43
2.5	123.0	0.06	0.10	±0.43
3.5	256.2	-0.20	-0.25	±0.43
3.7	249.8	-0.11	-0.16	±0.43
6.6	74.7	-0.30	-0.29	±0.98
8.0	67.2	-0.14	-0.13	±0.98
10.0	66.2	0.02	0.04	±0.98
15.0	51.2	0.21	0.21	±0.98
26.6	112.6	0.16	0.11	±0.98
30.0	121.9	-0.01	-0.02	±0.98
35.0	121.3	-0.12	-0.08	±0.98
40.0	102.3	-0.18	-0.11	±0.98
50.0	61.5	0.02	0.07	±0.98
55.0	75.9	0.02	-0.01	±0.98
60.0	80.5	-0.01	-0.01	±0.98
65.0	77.1	0.05	0.10	±0.98
70.0	74.3	0.07	0.08	±0.98
75.0	74.8	0.01	-0.03	±0.98
75.0	96.6	0.00	-0.01	±0.98
0.08	95.4	-0.09	-0.08	±0.98
85.0	58.0	-0.02	-0.02	±0.98
90.0	84.0	0.00	0.01	±0.98
92.0	83.9	0.02	0.01	±0.98
95.0	76.2	-0.01	-0.05	±0.98
97.0	69.1	0.01	-0.03	±0.98
100.0	66.9	0.10	0.09	±0.98
105.0	67.2	-0.21	-0.18	±0.98
110.0	78.1	0.12	0.12	±0.98

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%.

Certificate No: EUmm-9643 Aug23 Page 3 of 18

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.

B Linearization parameter uncertainty for maximum specified field strength



August 04, 2023

Page: 36 of 72

EUmmWV4 - SN:9643

Parameters of Probe: EUmmWV4 - SN:9643

Calibration Results for Modulation Response

UID	Communication System Name		A dB	$dB\sqrt{\mu V}$	С	dB	WR mV	Max dev.	Max Unc ^E k = 2				
0	CW	X	0.00	0.00	1.00	0.00	132.8	±3.3%	±4.7%				
		Y	0.00	0.00	1.00	1000	68.6	170					
10352	Pulse Waveform (200Hz, 10%)	X	3.16	60.00	14.90	10.00	6.0	±1.3%	±9.6%				
		Y	3.05	60.00	15.34	1	6.0	100					
10353	Pulse Waveform (200Hz, 20%)	X	2.59	61.93	14.50	6.99	12.0	±1.5%	±9.6%				
		Y	2.07	60.00	14.33		12.0		1				
10354	Pulse Waveform (200Hz, 40%)	X	1.64	62.58	13.52	3.98	23.0		±9.6%				
		Y	1.25	60.00	13.13	23.5	23.0		-				
10355	Pulse Waveform (200Hz, 60%)	X	0.76	60.00	11.76	2.22	27.0		±9.69				
		Y	0.83	60.00	12.15		27.0		25.41				
10387	QPSK Waveform, 1 MHz	X	1.20	60.00	12.37	1.00	22.0		+1.3%	+1.3%	+1.3%	±1.3%	±9.6%
		Y	1.32	60.00	12.05		22.0	-11274	=-13				
10388	QPSK Waveform, 10 MHz	X	1.23	60.00	12.11	0.00	22.0	±0.8%	±9.6%				
		Y	1.46	60.00	11.72		22.0						
10396	64-QAM Waveform, 100 kHz	X	3.92	67.74	16.94	3.01	17.0	±0.6%	±9.6%				
		Y	5.78	71.25	17.99	- 20	17.0	25.070	7.5.5				
10399	64-QAM Waveform, 40 MHz	X	2.04	60.00	12.54	0.00	19.0	±0.9%	±9.6%				
		Y	2.22	60.00	12.32		19.0		-3.07				
10414	WLAN CCDF, 64-QAM, 40 MHz	X	3.18	60.00	12.95	0.00	12.0	±0.9%	±9.6%				
		Y	3.34	60.00	12.77	-100	12.0	25.19	_5,0				

Note: For details on UID parameters see Appendix

Certificate No: EUmm-9643_Aug23

Page 4 of 18

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.



Page: 37 of 72

EUmmWV4 - SN:9643 August 04, 2023

Parameters of Probe: EUmmWV4 - SN:9643

Calibration Results for Linearity Response

Frequency GHz	Target E-Field V/m	Deviation Sensor X dB	Deviation Sensor Y dB	Unc $(k=2)$ dB
0.9	50.0	-0.06	0.11	±0.2
0.9	100.0	-0.02	0.04	±0.2
0.9	500.0	-0.02	-0.01	±0.2
0.9	1000.0	0.01	0.01	±0.2
0.9	1500.0	0.01	0.03	±0.2
0.9	2100.0	-0.01	0.02	±0.2

Sensor Frequency Model Parameters (750 MHz - 55 GHz)

	Sensor X	Sensor Y
R (Ω)	44.84	155.59
R _p (Ω)	66.16	240.90
L (nH)	0.04504	0.14340
C (pF)	0.3268	0.1168
Cp (pF)	0.1230	0.0373

Sensor Frequency Model Parameters (55 GHz - 110 GHz)

	Sensor X	Sensor Y
R (Ω)	35.26	29.26
R _p (Ω)	144.91	121.67
L (nH)	0.07152	0.05890
C (pF)	0.0668	0.0850
Cp (pF)	0.0719	0.0897

Sensor Model Parameters

	C1 fF	C2 fF	ν-1	T1 msV ⁻²	T2 ms V ⁻¹	T3 ms	T4 V-2	T5 V-1	T6
X	58.9	424.25	33.37	0.92	8.71	5,00	0.00	1.80	1.01
У	53.1	377.16	32.49	2.66	8.49	5.02	0.00	2.00	1.01

Other Probe Parameters

Sensor Arrangement	Rectangular
Connector Angle	150.4°
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	320 mm
Probe Body Diameter	8 mm
Tip Length	23 mm
Tip Diameter	8.0 mm
Probe Tip to Sensor X Calibration Point	1.5 mm
Probe Tip to Sensor Y Calibration Point	1.5 mm

Certificate No: EUmm-9643_Aug23

Page 5 of 18

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 f (886-2) 2298-0488

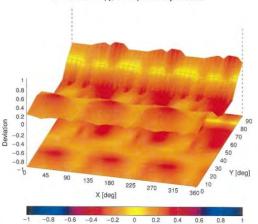


Page: 38 of 72

EUmmWV4 - SN:9643 August 04, 2023

Deviation from Isotropy in Air 30GHz: 3D isotropy, E-field parallel to probe axis 0.8 0.6 0.4 0.2 0 -0.6 315

60GHz: 3D isotropy, E-field parallel to probe axis



Probe isotropy for E_{tot} : probe rotated $\phi=0^\circ$ to 360°, tilted from field propagation direction \tilde{k} Parallel to the field propagation ($\psi=0^\circ-90^\circ$) at 30 GHz: deviation within ± 0.26 dB Parallel to the field propagation ($\psi=0^\circ-90^\circ$) at 60 GHz: deviation within ± 0.38 dB

Certificate No: EUmm-9643_Aug23

Page 6 of 18

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



Page: 39 of 72

EUmmWV4 - SN:9643 August 04, 2023

Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
0	111111	CW	CW	0.00	±4.7
10010	CAB	SAR Validation (Square, 100 ms, 10 ms)	Test	10.00	±9.6
10011	CAC	UMTS-FDD (WCDMA)	WCDMA	2.91	±9.6
0012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	±9.6
0013	CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	±9.6
0021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	±9.6
0023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	±9.6
0024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	±9.6
0025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	19.6
0026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	±9.6
0027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	29.6
0028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	19.6
0029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	19.6
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	19.6
0031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	±9.6
0032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	±9.6
0033	CAA	IEEE 802,15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	±9.6
0034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	±9.6
0035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	±9.6
0036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	±9.6
0037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	±9.6
0038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	±9.6
0039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.10	±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	
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	±9.6
0049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	±9.6
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mops)	TD-SCDMA		±9.6
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM GSM	11.01	±9.6
10059	CAB	IEEE 802.11b WIFI 2.4 GHz (DSSS, 2 Mbps)		6.52	±9.6
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	±9.6
10061	CAB		WLAN	2.83	±9.6
		IEEE 802.11b WIFI 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	19.6
10062	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	±9.6
10064	CAD	IEEE 802.11a/h WIFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	±9.6
10064	CAD	IEEE 802.11a/h WIFI 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	±9.6
		IEEE 802.11a/h WIFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	±9.6
10066	CAD	JEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	±9.6
10067	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	±9.6
10068	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	±9.6
10069	CAD	IEEE 802.11a/h WIF 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	19.6
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	29.6
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	CAC	LIMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	±9.6
10099	DAG	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	±9.6
10100	CAF	LTE-FDD (SC-FDMA, 100% RB, 20MHz, QPSK)	LTE-FDD	5.67	±9.6
0101	CAF	LTE-FDD (SC-FDMA, 100% RB, 20MHz, 16-QAM)	LTE-FDD	6.42	±9.6
10102	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10103	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TOD	9.29	19.6
10104	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	±9.6
10105	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TOD	10.01	±9.6
10108	CAH	LTE-FDD (SC-FDMA, 100% RB, 10MHz, QPSK)	LTE-FDD	5.80	±9.6
10109	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10110	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FOD	5.75	±9.6
		LTE-FDD (SC-FDMA, 100% RB, 5MHz, 16-QAM)	FIELDD.	0.13	33.0

Certificate No. EUmm-9643 Aug23 Page 7 of 18

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.

台灣檢驗科技股份有限公司



Page: 40 of 72

EUmmWV4 - SN:9643 August 04, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
10112	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	±9.6
10113	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDO	6.62	±9.6
0114	CAD	IEEE 802.11n (HT Greenfield, 13.5 Mbps. BPSK)	WLAN	8.10	±9.6
0115	CAD	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	±9.6
0116	CAD	IEEE 802.11n (HT Greenfield, 135Mbps, 64-QAM)	WLAN	8.15	±9.6
0117	CAD	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	19.6
10140	CAF	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	±9.6
10141	CAF	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	±9.6
10142	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
10143	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	±9,6
10144	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	±9.6
10145	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	±9.6
10146	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	±9.6
10147	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	±9.6
10149	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
10150	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10151	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TOD	9.28	±9.6
10152	CAH	LTE-TDD (SC-FDMA, 50% RB, 20MHz, 16-QAM)	LTE-TOD	9.92	±9.6
10153	CAH	LTE-TDD (SC-FDMA, 50% RB, 20MHz, 64-QAM)	LTE-TDD	10.05	±9.6
10154	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	±9.6
10155	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10156	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	±9.6
10157	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	±9.6
10158	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	±9.6
10159	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	±9.6
10160	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	±9.6
10161	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 18-QAM)	LTE-FDD	6.43	19.6
10162	CAF	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	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	±9.6
10170	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10171	AAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-DAM)	LTE-FDD	6.49	±9.6
10172	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	±9.6
10173	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10174	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10175	CAH		LTE-FDD	5.72	±9.6
10176	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10177	CAJ	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	±9.6
10178	CAH	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10179	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10180	CAH	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10181	CAF	LTE-FDD (SC-FDMA, 1 RB, 15MHz, QPSK)	LTE-FDD	5.72	±9.6
10182	CAF	LTE-FDD (SC-FDMA, 1 RB, 15MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10183	AAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10184	CAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
10185	CAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	19.6
10186	AAF	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	
10188	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10189	AAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FOD	6.50	±9.6
10193	CAD	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	±9.6
10194	CAD	IEEE 802,11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	
10195	CAD	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	±9.6
10196	CAD	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	19.6
10197	CAD		WLAN	8.13	
10198	CAD	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.13	±9.6
10219	CAD	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	±9.6
10220	CAD	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.03	±9.6
10221	CAD	IEEE 802.11n (HT Mixed, 43.3 Mops, 16-QAM)	WLAN		±9.6
10222	GAD	IEEE 802.11n (HT Mixed, 72.2 Mops, 64-QAM)		8.27	±9.6
10223	CAD	IEEE 802.1 In (HT Mixed, 15 Mbps, 18-QAM)	WLAN	8.06	±9.6
10224	CAD		WLAN	8.48	19.6
	LOUG	reactive (11 Mixed, 100 Maps, 69-LAMM)	WLAN	8.08	±9.6

Certificate No: EUmm-9643_Aug23

Page 8 of 18

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



Page: 41 of 72

EUmmWV4 - SN:9643

August 04, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	
10225	CAC	UMTS-FDD (HSPA+)	WCDMA	5.97	±9.6
0226	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TOO	9,49	±9.6
10227	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TOO	10.26	±9.6
0228	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDO	9.22	±9.6
0229	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TOD	9.48	±9.6
0230	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TOD	10.25	±9.6
10231	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	=9.6
0232	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TOD	9.48	±9.6
0233	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10234	CAH	LTE-TDD (SC FDMA, 1 RB, 5 MHz, QPSK)	LTE-TOD	9.21	±9.6
10235	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	19.6
0236	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
0237	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TOD	9.21	±9.6
0238	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TOD	9.48	±9.6
0239	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
0240	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	±9.6
0241	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TOD	9.82	±9.6
0242	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	±9.6
0243	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	±9.6
0244	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TOD	10.06	±9.6
0245	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TOD	10.06	±9.6
0246	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, OPSK)	LTE-TOD	9.30	±9.6
0247	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	±9.6
0248	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TOD	10.09	19.6
0249	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TOD	9.29	
0250	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TOD	9.29	±9.6
0251	CAH	LTE-TDD (SC-FDMA 50% RB. 10 MHz. 64-QAM)	LTE-TDD	10.17	±9.6
0252	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)			±9,6
0253	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.24	±9.6
0254	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	±9.6
0255	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	10.14	±9.6
0256	CAC		LTE-TDD	9.20	±9.6
0257	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TOD	9.96	19.6
0258	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 84-QAM) LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TOD	10.08	±9.6
10258	CAE		LTE-TOD	9.34	19.6
		LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	±9.6
10260	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TOD	9.97	±9,6
10261	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	±9.6
0262	CAH	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 16-QAM)	LTE-TOO	9.83	±9.6
10263	CAH	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 64-QAM)	LTE-TDD	10/16	±9.6
0264	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	±9.6
0265	CAH	LTE-TDD (SC-FDMA, 100% RB, 10MHz, 16-QAM)	LTE-TDD	9.92	±9,6
0266	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TOD	10.07	19.6
0267	CAH	LTE-TDD (SC-FDMA, 100% RB, 10MHz, QPSK)	LTE-TDD	9.30	±9.6
0268	CAG	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 16-QAM)	LTE-TDD	10.06	±9.6
0269	CAG	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 84-QAM)	LTE-TDD	10.13	±9.6
0270	CAG	LTE-TDD (SC-FDMA, 100% RB, 15MHz, QPSK)	LTE-TDD	9.58	±9.6
0274	CAC	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	±9.6
0275	CAC	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	±9.6
0277	CAA	PHS (QPSK)	PHS	11.81	19.6
0.278	CAA	PHS (QPSK, BW 884 MHz, Rolloff 0.5)	PHS	11.81	±9.6
0279	CAA	PHS (QPSK, BW 884 MHz, Rolloff 0.38)	PHS	12.18	±9.6
0290	AAB	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	±9.6
0291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	±9.6
0292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	±9.6
0293	AAB	CDMA2000, RC3, SO3, Full Rate	GDMA2000	3.50	±9.6
0295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	±9.6
0297	AAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	±9.6
0298	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	±9.6
0299	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	±9.6
0300	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FOO	6.60	
0301	AAA	IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC)	WMAX	12.03	±9.6
0302	AAA	IEEE 802.16e WIMAX (29:18, 5 ms. 10 MHz, QPSK, PUSC, 3 CTRL symbols)	WIMAX	12.03	±9.6
10303	AAA	IEEE 802.16e WIMAX (25.16, 5 ms. 10 MHz, QPSK, PUSC, 3 CTHL symbols)	WMAX		±9.6
10303	AAA		1114000	12.52	±9.6
10304	AAA	IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, 64QAM, PUSC)	WMAX	11.86	19.6
0306	1444	IEEE 802.16e WIMAX (31:15, 10 ms, 10 MHz, 64QAM, PUSC, 15 symbols)	WMAX	15.24	±9.6
	AAA	IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, 64QAM, PUSC, 18 symbols)	WMAX	14.67	±9.6

Certificate No: EUmm-9643_Aug23

Page 9 of 18

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.

台灣檢驗科技股份有限公司



Page: 42 of 72

EUmmWV4 - SN:9643 August 04, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^E k =
10307	AAA	IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, QPSK, PUSC, 18 symbols)	WiMAX	14.49	19.6
10308	AAA	JEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, 16QAM, PUSC)	WIMAX	14.46	±9.6
0309	AAA	IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, 16QAM, AMC 2x3, 18 symbols)	WIMAX	14.58	±9.6
10310	AAA	IEEE 802.16e WIMAX (29:18, 10 ms. 10 MHz, QPSK, AMC 2x3, 18 symbols)	WIMAX	14.57	±9.6
0311	AAE	LTE-FDD (SC-FDMA, 100% RB, 15MHz, QPSK)	LTE-FDD	5.06	±9.6
10313	AAA	IDEN 1:3	IDEN	10.51	±9.6
0314	AAA	DEN 1:6	IDEN	13.48	±9.6
D315	AAB	IEEE 802.11b WiFI 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	WLAN	1.71	±9.6
10316	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	19.6
10317	AAD	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	±9.6
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	±9.6
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6,99	±9.6
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	±9.6
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	±9.6
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	±9.6
10387	AAA.	QPSK Waveform, 1 MHz	Generia:	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	5.27	±9.6
10400	AAE	IEEE 802.11ac WiFi (20 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.37	19.6
10401	AAE	IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.60	19.6
10402	AAE	IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc duty cycle)	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	19.6
10406	AAB	CDMA2000, RC3, SC32, SCH0, Full Rate	CDMA2000	5.22	19.6
10410	AAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	LTE-TOD	7.82	19.6
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 duty cycle)	WLAN	1.54	±9.6
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10417	AAC	IEEE 802.11a/h WIFI 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	WLAN		19.6
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle. Short preambule)	WLAN	8.14	±9.6
10422	AAC	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.19	±9.6
10423	AAC	IEEE 802 11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.32	±9.6
10424	AAC	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)		B.47	±9.6
10425	AAG	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.40	±9.6
10426	AAC	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN		±9.6
10427	AAC	IEEE 802.11s (HT Greenfield, 150 Mbps, 64-QAM)		8.45	±9.6
10430	AAE	LTE-FDD (OFDMA, 5MHz, E-TM 3.1)	WLAN	8.41	±9.6
10431	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.28	19.6
10432	AAD	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.38	±9.6
10433	AAD	LTE-FDD (OFDMA, 19MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
10434	AAB	W-CDMA (BS Test Model 1, 64 DPCH)	LTE-FDD	8.34	±9.6
10435	AAG		WCDMA	8.60	±9.6
10447	AAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TOD	7.82	±9.6
10448	AAE	LTE-FDD (OFDMA, 5MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	±9.6
10448	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	LTE-FDD	7.53	±9.6
10449	AAD	LTE-FDD (OFDMA, 15MHz, E-TM 3.1, Cliping 44%)	LTE-FDD	7,51	±9.6
		LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7,48	±9.6
10451	AAB	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	19.6
10453	AAE	Validation (Square, 10 ms, 1 ms)	Test	10.00	19.6
10456	AAC	IEEE 802.11ac WiFi (160 MHz, 84-QAM, 99pc duty cycle)	WLAN	8.63	±9.6
10457	AAB	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	19.6
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	±9.6
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	±9.6
10460	AAB	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	±9.6
	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2.3,4,7,8,9)	LTE-TDD	7.82	±9.6
0461	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.30	19.6
10461		LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	19.6
10461 10462 10463	AAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subtrame=2,3,4,7,8,9)	LTE-TDD	7.82	±9,6
10461 10462 10463 10464	AAD	CTC TOD (GGT GMA, TTG, GTGK, GC Subitamenz, 3,4,7,6,9)			10.0
10461 10462 10463 10464 10465	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	B.32	±9.6
10461 10462 10463 10464 10465 10466	AAD AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)		B.32 8.57	±9.6
10461 10462 10463 10464 10465 10466 10467	AAD AAD AAD AAG	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-DAM, UL Subtrame+2,3.4,7,8,9) LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subtrame+2,3.4,7,8,9) LTE-TDD (SC-FDMA, 1 RB, 5 MHz, OPSK, UL Subtrame+2,3.4,7,8,9)	LTE-TOD		
10461 10462 10463 10464 10465 10466 10467 10468	AAD AAD AAG AAG	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.57	±9.6
10461 10462 10463 10464 10465 10466 10467 10468 10469	AAD AAD AAG AAG AAG	LTE-TDD [SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subtrame-2.3.4.7.8.9) LTE-TDD [SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subtrame-2.3.4.7.8.9) LTE-TDD [SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subtrame-2.3.4.7.8.9) LTE-TDD [SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subtrame-2.3.4.7.8.9) LTE-TDB [SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subtrame-2.3.4.7.8.9)	LTE-TDD LTE-TDD	8.57 7.82	±9.6
10461 10462 10463 10464 10465 10466 10467	AAD AAD AAG AAG	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-DAM, UL Subframe=2,3.4,7.8,6) LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 84-DAM, UL Subframe=2,3.4,7.8,9) LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 0 PSK, UL Subframe=2,3.4,7.8,9) LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3.4,7.8,9)	LTE-TDD LTE-TDD LTE-TDD	8.57 7.82 8.32	±9.6 ±9.6

Certificate No: EUmm-9643_Aug23 Page 10 of 18

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.

台灣檢驗科技股份有限公司



Page: 43 of 72

EUmmWV4 - SN:9643 August 04, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10472	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10473	AAF	LTE-TDD (SC-FDMA, 1 RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10474	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10475	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8.9)	LTE-TDD	8.57	±9.6
10477	AAG	LTE-TDD (SC-FDMA, 1 R8, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
1047B	AAG	LTE-TDD (SC-FDMA, 1 R8, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.57	±9.6
10479	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TOD	7,74	±9.6
10480	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.18	±9.6
10481	AAC	LTE-TDD (SC-PDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	B.45	±9.6
10482	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.71	±9.6
10483	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.39	±9.6
10484	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.47	≥9.6
10486	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	±9.6
10487	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.38	29.6
10488	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 54-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.60	±9.6
10489	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.70	19.6
10490	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.31	±9.6
10491	AAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 54-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
10492	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10493	AAF	LTE-TDD (SC-FDMA, 50% RB, 15MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 15MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.41	19.6
10494	AAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.55	±9.6
10495	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QFSK, DL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10496	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subtrame=2,3,4,7,8,9)	LTE-TDD	8.37	±9.6
10497	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, GPSK, UL Subtrame=2,3,4,7,8,9)	LTE-TOO	8.54	±9.6
10498	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subtrame=2,3,4,7,8,9)	LTE-TOD	7.67	±9.6
10499	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.40	19.6
10500	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.68	19.6
10501	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOO	7.67	19.6
10502	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UE Subframe=2,3,4,7,8,9)	LTE-TDD	8.44	±9.6
10503	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.52 7.72	±9.6
10504	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.31	±9.6
10505	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.54	±9.6
10506	AAG	LTE-TDD (SC-FDMA, 100% RB, 10MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TOD	7.74	±9.6
10507	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.36	±9.6
10508	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	±9.6
10509	AAF	LTE-TDD (SC-FDMA, 100% RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TOD	7.99	±9.6
10510	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2.3,4,7,8,9)	LTE-TOD	8.49	19.6
10511	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.51	±9.6
10512	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8.9)	LTE-TDD	7.74	±9.6
10513	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2.3.4.7.8.9)	LTE-TDD	8.42	±9.6
10514	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	±9.6
10515	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	WLAN	1.58	19.6
10516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	WLAN	1.57	±9.6
10517	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	WLAN	1.58	±9.6
10518	AAC	IEEE 802.11a/h WIFI 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	WLAN	B.23	±9.6
10519	AAC	IEEE 802.11a/h WIFI 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.39	±9.6
10520	AAC	IEEE 802.11a/h WIFI 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.12	±9.6
10521	AAC	JEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	WLAN	7,97	±9.6
10522	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.45	±9.6
10523	AAC	IEEE 802 11 m/h WIFI 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.08	±9.6
10524	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.27	±9.6
10525	AAC	IEEE 802 11ac WiFi (20 MHz, MCS0, 99pc duty cycle)	WEAN	8.36	±9.6
10526	AAC	IEEE 802.11ac WiFi (20 MHz, MCS1, 99pc duty cycle)	WLAN	8.42	±9.6
10527	AAC	IEEE 802,11ac WiFi (20 MHz, MCS2, 99pc duty cycle)	WLAN	8.21	±9.6
10528	AAC	IEEE 802.11ac WIFI (20 MHz, MCS3, 99pc duty cycle)	WLAN	8.36	±9.6
10529	AAC	IEEE 802.11ac WiFi (20 MHz, MCS4, 99pc duty cycle)	WLAN	8.36	±9.6
10531	AAC	IEEE 802.11ac WiFi (20 MHz, MCS6, 99pc duty cycle)	WLAN	8.43	±9.8
10532	AAC	IEEE 802.11ac WiFi (20 MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6
10533	AAC	IEEE 802,11ac WiFi (20 MHz, MCS8, 99pc duty cycle)	WLAN	8.38	±9.6
10534	AAG	IEEE 802.11ac WiFi (40 MHz, MCS0, 99pc duty cycle)	WLAN	8.45	19.6
10535	AAC	IEEE 802.11ac WiFi (40 MHz, MCS1, 99pc duty cycle)	WLAN	8.45	±9.6
10536	AAC	IEEE 802.11ac WIFI (40 MHz, MCS2, 99pc duty cycle)	WLAN	8.32	±9,6
10537	AAC	IEEE 802,11ac WiFi (40 MHz, MCS3, 99pc duty cycle)	WLAN	8.44	±9.6
10538	AAC	IEEE 802.11ac WiFI (40 MHz, MCS4, 99pc duty cycle)	WLAN	8.54	±9.6
10540	AAC	(EEE 802.11ac WiFi (40 MHz, MCS6, 99pc duty cycle)	WLAN	8.39	±9.6

Certificate No: EUmm-9643_Aug23

Page 11 of 18

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.



Page: 44 of 72

EUmmWV4 - SN:9643 August 04, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10541	AAC	IEEE 802.11ac WiFi (40 MHz, MCS7, 99pc duty cycle)	WLAN	B.46	±9.6
10542	AAC	IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc duty cycle)	WLAN	8.65	19.6
10543	AAC	IEEE 802.11ac WiFi (40 MHz, MCS9, 99pc duty cycle)	WLAN	8.65	±9.6
10544	AAC	IEEE 802 11ac WIFI (80 MHz, MCS0, 99pc duty cycle)	WLAN	8.47	±9.6
10545	AAC	IEEE 802.11ac WiFi (80 MHz, MCS1, 99pc duty cycle)	WLAN	8.55	±9.6
10546	AAC	IEEE 802.11ac WiFi (80 MHz, MCS2, 99pc duty cycle)	WLAN	8.35	±9.6
10547	AAC	IEEE 802 11ac WiFi (80 MHz, MCS3, 99pc duty cycle)	WLAN	8.49	±9.6
10548	AAC	IEEE 802.11ac WiFI (80 MHz, MCS4, 99pc duty cycle)	WLAN	8.37	±9.6
10550	AAC	IEEE 802.11ac WiFi (80 MHz, MCS6, 99pc duty cycle)	WLAN	8.38	+9.6
10551	AAC	IEEE 802.11ac WIFI (80 MHz, MCS7, 99pc duty cycle)	WLAN	8.50	19.6
10552	AAC	IEEE 802.11ac WiFi (80 MHz, MCS8, 99pc duty cycle)	WLAN	B.42	±9.6
10553	AAC	IEEE 802.11ac WiFi (80 MHz, MCS9, 99pc duty cycle)	WLAN	8.45	19.6
10554	AAD	IEEE 802 11ac WIFI (160 MHz, MCS0, 99pc duty cycle)	WLAN	8.48	±9.6
10555	AAD	IEEE 802,11ac WiFi (160 MHz, MCS1, 99pc duty cycle)	WLAN	8.47	±9.6
10556	AAD	IEEE 802,11ac WiFi (160 MHz, MCS2, 99pc duty cycle)	WLAN	8.50	±9.6
10557	AAD	IEEE 802.11ac WiFi (160 MHz, MGS3, 99pc duty cycle)	WLAN	8.52	±9.6
10558	AAD	IEEE 802.11ac WiFI (160 MHz, MCS4, 99pc duty cycle)	WLAN	8.61	±9.6
10560	AAD	IEEE 802.11ac WiFI (160 MHz, MCS6, 99pc duty cycle)	WLAN	8.73	±9.6
10561	AAD	IEEE 802.11ac WIFI (160 MHz, MCS7, 99pc duty cycle)	WLAN	8.56	±9.6
10562	AAD	IEEE 802.11ac WiFI (160 MHz, MCS8, 99pc duty cycle)	WLAN	8.69	±9.6
10563	AAD	IEEE 802.11ac WiFi (160 MHz, MCS9, 99pc duty cycle)	WLAN	8.77	±9.8
10564	AAA	IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.25	19.6
10565	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.45	19.6
10566	AAA	IEEE 802.11g WiFl 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.13	19.6
10567	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	WEAN.	8.00	19.6
10568	AAA	IEEE 802 11g WiFi 2 4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.37	
10569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.10	±9.6
10570	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.30	
10571	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	WLAN	1.99	±9.6
10572	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	WLAN		±9.6
10573	AAA	IEEE 802.11b WiFl 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)		1.99	±9.6
10574	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	WLAN	1,98	±9.6
10575	AAA	IEEE 802,11g WiFi 2.4 GHz (DSSS-OFDM, 6Mbps, 90pc duty cycle)	WLAN		±9.6
10576	AAA	IEEE 802.11g WiFi 2 4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)		8.59	±9.6
10577	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.60	±9.6
10578	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.70	19.6
10579	AAA	IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	7740.00	8.49	±9.6
10580	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.36	±9.6
10581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	WLAN WLAN	8.76	±9.6
10582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)		8.35	±9.6
10583	AAC	IEEE 802.11a/h WIFI 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.67	£9.6
10684	AAC	IEEE 802,11a/h WIF 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.59	±9.6
10585	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.60	±9.6
10586	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6
10587	AAC	IEEE 902 11a/h WIELE CHY (OFDM 04 Maps, 90pc buty cycle)	WLAN	8.49	±9.6
10588	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8,36	±9.6
10589	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle) IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.76	±9.6
10590	AAC		WLAN	8.35	±9.6
10590	AAC	IEEE 802.11a/h WIFI 5 GHz (OFDM, 54 Mbps, 90pc duty cycle) IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc duty cycle)	WLAN	8.67	±9.6
10591	AAC	IEEE 802.11ft (HT Mixed, 20 MHz, MCS0, 90pc duty cycle)	WLAN	8.63	£9,6
10593	AAC	IEEE BOX 118 (FT MORE), 20 MHZ, MOST, 90PC duty cycle)	WLAN	8.79	±9.6
10593	AAC	IEEE 802.11rr (HT Mixed, 20 MHz, MCS2, 90pc duty cycle)	WLAN	8.64	±9.6
10595	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle)	WLAN	8.74	±9.6
10595		IEEE 802 11n (HT Mixed, 20 MHz, MCS4, 90pc duty cycle)	WLAN	8.74	±9.6
10596	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc duty cycle)	WLAN	8.71	±9.6
		IEEE 802.11r (HT Mixed, 20 MHz, MCS6, 90pc duty cycle)	WLAN	8.72	±9.5
10598	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc duty cycle)	WLAN	8.50	±9.6
10599	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc duty cycle)	WLAN	8.79	±9.6
10600	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc duty cycle)	WLAN	8.88	±9.6
10601	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc duty cycle)	WLAN	8.82	19.6
10602	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle)	WLAN	8.94	±9.5
0603	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS4, 90pc duty cycle)	WLAN	9.03	±9.6
10604	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle)	WLAN	8.76	±9,6
10605	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc duty cycle)	WLAN	8.97	±9.6
10608	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS7, 90pc duty cycle)	WLAN	8.82	±9.6
10607	AAG	IEEE 802.11ac WiFi (20 MHz, MCS0, 90pc duty cycle)	WLAN	8.64	±9.6
10608	AAC	IEEE 802.11ac WiFi (20 MHz, MCS1, 90pc duty cycle)	WLAN	8.77	19.6

Certificate No: EUmm-9643_Aug23

Page 12 of 18

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 45 of 72

EUmmWV4 - SN:9643

August 04, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = 1
10609	AAC	IEEE 802.11ac WIFI (20 MHz, MCS2, 90pc duty cycle)	WLAN	8.57	±9.6
0610	AAC	IEEE 802.11ac WIFI (20 MHz, MCS3, 90pc duty cycle)	WLAN	8.78	±9.6
0611	AAC	IEEE 802.11ac WIFI (20 MHz, MCS4, 90pc duty cycle)	WLAN	8.70	±9.6
0612	AAC	IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6
0513	AAC	IEEE 802.11ac WIFI (20 MHz, MCS6, 90pc duty cycle)	WLAN	8.94	±9.6
0614	AAC	IEEE 802.11ac WiFi (20 MHz, MCS7, 90pc duty cycle)	WLAN	8.59	±9.6
0615	AAC	IEEE 802.11ac WiFi (20 MHz, MCS8, 90pc duty cycle)	WLAN		
	AAC			8.82	±9.6
0616		IEEE 802.11ac WiFI (40 MHz, MCS0, 90pc duty cycle)	WLAN	8.82	±9.6
0617	AAC	IEEE 802.11ac WIFI (40 MHz, MCS1, 90pc duty cycle)	WLAN	8.81	±9.6
0618	AAC	IEEE 802,11ac WIFI (40 MHz, MCS2, 90pc duty cycle)	WLAN	8.58	±9.6
0619	AAC	IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc duty cycle)	WLAN	8.86	±9.6
0620	AAC	IEEE 802.11ac WiFi (40 MHz, MCS4, 90pc duty cycle)	WLAN	8.87	±9.6
0621	AAC	IEEE 802.11ac WiFI (40 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6
0622	AAC	IEEE 802 11ac WIFI (40 MHz, MCS6, 90pc duty cycle)	WLAN	8.68	±9.6
0623	AAC	IEEE 802.11ac WIFI (40 MHz, MCS7, 90pc duty cycle)	WLAN	8.82	±9.6
0624	AAC	IEEE 802.11ac WIFI (40 MHz, MCS8, 90pc duty cycle)	WLAN	8.96	±9.6
0625	AAC	IEEE 802.11ac WiFI (40 MHz, MCS9, 90pc duty cycle)	WLAN	8.96	±9.6
0626	AAC	IEEE 802.11ac WiF1 (40 MHz, MCS0, 90pc duty cycle)			
		TEEE BUZ, I Tac WIFT (80 MPZ, MGSU, 90pc duty cycle)	WLAN	8.83	±9.6
0627	AAC	IEEE 802.11ac WIFI (80 MHz, MCS1, 90pc duty cycle)	WLAN	8.88	±9.6
0628	AAC	IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc duty cycle)	WLAN	8.71	±9.6
0629	AAC	IEEE 802.11ac WIFi (80 MHz, MCS3, 90pc duty cycle)	WLAN	8.85	±9.6
0630	AAC	IEEE 802.11ac WiFi (80 MHz, MCS4, 90pc duty cycle)	WLAN	8.72	±9.6
0631	AAC	IEEE B02.11ac WiFi (80 MHz, MCS5, 90pc duty cycle)	WLAN	B.81	±9.6
0632	AAC	IEEE 802.1 tac WiFi (80 MHz, MCS6, 90pc duty cycle)	WLAN	8.74	±9.6
0633	AAG	IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc duty cycle)	WLAN	8.83	±9.6
0634	AAC	IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc duty cycle)	WLAN	8.80	±9.6
0635	AAC	IEEE 802,11ac WiFi (80 MHz, MCS9, 90pc duty cycle)	WLAN	8.81	±9.6
0636	AAD	IEEE 802,11ac WiF (do MHz, MCS0, 90pc duty cycle)	WLAN	-	
0637	AAD			8.83	±9.6
		IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc duty cycle)	WLAN	8.79	±9.6
0.638	AAD	IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc duty cycle)	WLAN	8.86	±9.6
10639	AAD	IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc duty cycle)	WLAN	8.85	±9.6
10640	AAD	IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc duty cycle)	WLAN	8.98	±9.6
10641	AAD	IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc duty cycle)	WLAN	9.06	±9.6
10642	AAD	IEEE 802.11ac WiFi (180 MHz, MCS6, 90pc duty cycle)	WLAN	9.06	±9.6
10643	AAD	IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc duty cycle)	WLAN	8.89	±9.6
0644	AAD	IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc duty cycle)	WLAN	9.05	±9.6
0645	AAD	IEEE 802.11ac WiFi (160 MHz, MCS9, 90pc duty cycle)	WLAN	9.11	19.6
0.646	AAH	LTE-TOD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	LTE-TOD	11.96	
10647	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)			±9.6
			LTE-TDD	11.96	±9.6
10648	AAA	CDMA2000 (1x Advanced)	CDMA2000	3.45	±9.6
10652	AAF	LTE-TDD (OFDMA, 5MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	±9.6
10653	AAF	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TOD	7.42	±9.6
10654	AAE	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TOD	6.96	19.6
10655	AAF	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	±9.6
10658	AAB	Pulse Waveform (200Hz, 10%)	Test	10.00	±9.6
10659	AAB	Pulse Waveform (200Hz, 20%)	Test	6.99	±9.6
10660	AAB	Pulse Waveform (200Hz, 40%)	Test	3.98	±9.6
0661	AAB	Pulse Waveform (200Hz, 60%)	Test	2.22	±9.6
0662	AAB	Pulse Waveform (200Hz, 80%)			
0670	AAA	Bluetooth Low Energy	Test	0.97	±9.6
			Bluetoath	2.19	±9.6
0671	AAC	IEEE 802,11ax (20 MHz, MCS0, 90pc duty cycle)	WLAN	9.09	19.6
10672	AAC	IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle)	WLAN	8.57	±9.6
0673	AAC	IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle)	WLAN	8.78	±9.6
0674	AAC	IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle)	WLAN	8.74	±9.6
0675	AAC	IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle)	WLAN	8.90	±9.6
0676	AAG	IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6
0677	AAC	IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle)	WLAN	8.73	±9.6
0678	AAC	IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle)	WLAN	8.78	±9.6
0679	AAC	IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle)			
	AAC		WLAN	8.89	±9.6
10680		IEEE 802.11ax (20 MHz, MOS9, 90pc duty cycle)	WLAN	8.80	19.6
10681	AAC	IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle)	WLAN	8.62	±9.6
10682	AAC	IEEE 802 11ax (20 MHz, MCS11, 90pc duty cycle)	WLAN	8.83	±9.6
	AAC	IEEE 802.11ax (20 MHz, MCS0, 99pc duty cycle)	WLAN	8.42	19.6
10683			WLAN	8.26	±9.6
	AAC	IEEE 802.11ax (20 MHz, MCS1, 99pc duty cycle)			
0683 0684 0685	AAG	IEEE 802.11ax (20 MHz, MCS1, 99pc duty cycle)	WLAN	8.33	19.6

Certificate No: EUmm-9643_Aug23

Page 13 of 18

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



Page: 46 of 72

EUmmWV4 - SN:9643

August 04, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
10687	AAC	IEEE 802.11ax (20 MHz, MCS4, 99pc duty cycle)	WLAN	8.45	±9.6
10688	AAC	IEEE 802.11ax (20 MHz, MCS5, 99pc duty cycle)	WLAN	8.29	±9.6
10689	AAC	IEEE 802.11ax (20 MHz, MCS6, 99pc duty cycle)	WLAN	8.55	±9.6
10690	AAC	IEEE 802.11ax (20 MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6
10691	AAC	IEEE 802.11ax (20 MHz, MCS8, 99pc duty cycle)	WLAN	8.25	±9.6
10692	AAC	IEEE 802.11ax (20 MHz, MCS9, 99pc duty cycle)	WLAN	8.29	19.6
10693	AAC	IEEE 802-11ax (20 MHz, MCS10, 99pc duty cycle)	WLAN	8.25	±9.6
10694	AAC	IEEE 802.11ax (20 MHz, MCS11, 99pc duty cycle)	WLAN	8.57	19.6
10695	AAC	IEEE 802.11ax (40 MHz, MCS0, 90pc duty cycle)	WLAN	8.78	19.6
10696	AAC	IEEE 802.11ax (40 MHz, MCS1, 90pc duty cycle)	WLAN	8.91	
10697	AAC	IEEE 802.11ax (40 MHz, MCS2, 90pg duty cycle)	WLAN	8.61	±9.6
10698	AAC	IEEE 802,11ax (40 MHz, MCS3, 90pc duty cycle)	WLAN	8.89	±9.8
10699	AAC	IEEE 802.11ax (40 MHz, MCS4, 90pc duty cycle)	WLAN	8.82	±9.6
10700	AAC	IEEE 802.11ax (40 MHz, MCS5, 90pc duty cycle)	WLAN		±9.6
10701	AAC	IEEE 802.11ax (40 MHz, MCS6, 90pc duty cycle)		B.73	±9.6
10702	AAC	IEEE 802.11ax (40 MHz, MCS7, 90pc duty cycle)	WLAN	8.86	±9.6
10703	AAC	IEEE 802.11ax (40 MHz, MCS8, 90pg duty cycle)	WLAN	8.70	±9.6
10704	AAC		WLAN	8.82	±9.6
10704	AAC	IEEE 802.11ax (40 MHz, MCS9, 90pc duty cycle)	WLAN	9.56	±9.6
		IEEE 802.11ax (40 MHz, MCS10, 90pc duty cycle)	WLAN	8.69	±9.6
10706	AAC	IEEE 802.11ax (40 MHz, MCS11, 90pc duty cycle)	WLAN	5.66	±9.6
10707	AAC	IEEE 802.11ax (40 MHz, MCS0, 99pa duty cycle)	WLAN	8.32	±9.6
10708	AAC	IEEE 802.11ax (40 MHz, MCS1, 99pc duty cycle)	WLAN	8.55	19.6
10709	AAC	IEEE 802.11ax (40 MHz, MCS2, 99pc duty cycle)	WLAN	8.33	±9.6
10710	AAC	IEEE 802.11ax (40 MHz, MCS3, 99pc duty cycle)	WLAN	8.29	±9.6
10711	AAC	IEEE 802.11ax (40 MHz, MCS4, 99pc duty cycle)	WLAN	8.39	±9.6
10712	AAC	IEEE 802.11ax (40 MHz, MCS5, 99pc duty cycle)	WLAN	8.67	+9.6
10713	AAC	IEEE 802.11ax (40 MHz, MCS6, 99pc duty cycle)	WLAN	8.33	±9.6
10714	AAC	IEEE 802.11ax (40 MHz, MCS7, 99pc duty cycle)	WLAN	B.26	+9.6
10715	AAC	IEEE 802.11ax (40 MHz, MCS8, 99pd duty cycle)	WLAN	8.45	±9.6
10716	AAC	IEEE 802.11ax (40 MHz, MCS9, 99pc duty cycle)	WLAN	8.30	±9.6
10717	AAC	IEEE 802.11ax (40 MHz, MCS10, 99pc duty cycle)	WLAN	8.48	19.6
10718	AAC	IEEE 802.11ax (40 MHz, MCS11, 99pc duty cycle)	WLAN	8.24	19.6
10719	AAC	IEEE 802,11ax (80 MHz, MGS0, 90pc duty cycle)	WIAN	8.81	
10720	AAC	IEEE 802.11ax (80 MHz, MCS1, 90pg duty cycle)	WLAN	8.87	±9.6
10721	AAC	IEEE 802.11ax (80 MHz, MCS2, 90pc duty cycle)	WLAN	8.76	±9.6
10722	AAC	IEEE 802.11ax (80 MHz, MCS3, 90pc duty cycle)	WLAN		±9.6
10723	AAC	IEEE 802.11ax (80 MHz, MCS4, 90pc duty cycle)		9.55	±9.6
10724	AAC	IEEE 802.11ax (80 MHz, MCS5, 90pc duty cycle)	WLAN	8.70	±9.6
10725	AAC	IEEE 802.11ax (80 MHz, MCS6, 90pc duty cycle)	WLAN	8.90	±9.6
10726	AAC		WLAN	8.74	±9.6
10727	AAC	IEEE 802.11ax (80 MHz, MCS7, 90pc duty cycle)	WLAN	8.72	±9.6
		IEEE 802.11ax (80 MHz, MCS8, 90pc duty cycle)	WLAN	B 66	±9.6
10728	AAC	IEEE 802.11ax (80 MHz, MCS9, 90pc duty cycle)	WLAN	8.65	±9.6
10729	AAC	IEEE 802.11ax (80 MHz, MCS10, 90pc duty cycle)	WLAN	8.64	±9,6
10730	AAC	IEEE 802.11ax (80 MHz, MCS11, 90pc duty cycle)	WLAN	8.67	±9.6
10731	AAC	IEEE 802.11ax (80 MHz, MCS0, 99pc duty cycle)	WLAN	8.42	±9.6
10732	AAC	IEEE B02.11ax (80 MHz, MCS1, 99pc duty cycle)	WLAN	B.46	±9.6
10733	AAC	IEEE 802.11ax (80 MHz, MCS2, 99pc duty cycle)	WLAN	8.40	±9.6
10734	AAC	IEEE 802.11ax (80 MHz, MCS3, 99pc duty cycle)	WLAN	8.25	±9.6
10735	AAC	IEEE 802.11ax (80 MHz, MCS4, 99pc duty cycle)	WLAN	8.33	19.6
10736	AAC	IEEE 802.11ax (80 MHz, MCS5, 99pc duty cycle)	WLAN	8.27	±9.5
10737	AAC	IEEE 802.11ax (80 MHz, MCS6, 99pc duty cycle)	WLAN	8.36	±9.6
10738	AAC	IEEE 802.11ax (80 MHz, MCS7, 99pc duty cycle)	WLAN	8.42	±9.6
10739	AAC	IEEE 802.11ax (80 MHz, MCS8, 99pc duty cycle)	WLAN	8.29	+9.6
10740	AAC	IEEE 802.11ax (80 MHz, MCS9, 99pc duty cycle)	WLAN	8.48	±9.6
10741	AAC	IEEE 802.11ax (80 MHz, MCS10, 99pc duty cycle)	WLAN	8.40	±9.6
10742	AAC	IEEE 802.11ax (80 MHz, MCS11, 99pc duty cycle)	WLAN	8.43	+9.6
10743	AAC	IEEE 802.11ax (160 MHz, MCS0, 90pc duty cycle)	WLAN	8.94	±9.6
10744	AAC	IEEE 802.11ax (160 MHz, MCS1, 90pc duty cycle)	WLAN	9.16	
10745	AAC	IEEE 802.11ax (160 MHz, MCS2, 90pc duty cycle)	WLAN		±9.6
10746	AAG	IEEE 802.11ax (160 MHz, MCS2, 90pc duty cycle)		6.93	±9.6
10747	AAC		WLAN	9.11	±9.6
10748	AAC	IEEE 802.11ax (160 MHz, MCS4, 90pc duty cycle)	WLAN	9.04	±9.6
		IEEE 802 11ax (160 MHz, MCS5, 90pc duty cycle)	WLAN	8.93	±9.6
10749	AAC	IEEE 802 11ax (160 MHz, MCS6, 90pc duty cycle)	WLAN	8.90	±9.6
10750	AAC	IEEE 802.11ax (160 MHz, MCS7, 90pc duty cycle)	WLAN	8.79	±9.6
10751	AAC	IEEE 802 11ax (160 MHz, MCS8, 90pc duty cycle)	WLAN	8.82	±9.6
10752	AAC	IEEE 802 11ax (160 MHz, MCS9, 90pc duty cycle)	WLAN	8.81	±9.6

Certificate No: EUmm-9643_Aug23

Page 14 of 18

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 47 of 72

EUmmWV4 - SN:9643

August 04, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =	
10753	AAC	IEEE 802.11ax (160 MHz, MCS10, 90pc duty cycle)	WLAN	9.00	±9.6	
0754	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	8.94	±9.6	
10755	AAC	IEEE 802.11ax (160 MHz, MCS0, 99pc duty cycle)	WLAN	8.64	±9.6	
10756	AAC	IEEE 802.11ax (160 MHz, MCS1, 99pc duty cycle)	WLAN	8.77	19.6	
10757	AAC	IEEE 802.11ax (160 MHz, MCS2, 99pc duty cycle)	WLAN	8.77	19.6	
10758	AAC	IEEE 802 11ax (160 MHz, MCS3, 99pc duty cycle)	WLAN	8.69	±9.6	
10759	AAC	IEEE 802.11ax (160 MHz, MCS4, 99pc duty cycle)	WLAN	B.58	19.6	
10760	AAC	IEEE B02.11ax (160 MHz, MCS5, 99pc duty cycle)	WLAN	8.49	±9.6	
10761	AAC	IEEE 802.11ax (160 MHz, MCS6, 99pc duty cycle)	WLAN	8.58	±9.6	
10762	AAC	IEEE 802.11ax (160 MHz, MCS7, 99pc duty cycle)	WLAN	8.49	±9.6	
10763	AAC	IEEE 802.11ax (160 MHz, MCS8, 99pc duty cycle)	WLAN	8.53	±9.6	
10764	AAC	IEEE 802.11ax (160 MHz, MCS9, 99pc duty cycle)	WLAN	8.54	±9.6	
10765	AAC	IEEE 802.11ax (160 MHz, MCS10, 99pc duty cycle)	WLAN	8.54	±9.6	
10766	AAC	IEEE 802.11ax (160 MHz, MCS11, 99pc duty cycle)	WLAN	8.51	±9.6	
10767	AAE	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	7.99	±9.6	
10768	AAD	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	±9.6	
10769	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	±9.6	
10770	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±9.6	
10771	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±9.6	
10772	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.23	±9.6	
10773	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.03	19.6	
10774	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	19.6	
10775	AAD	5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	±9.6	
10776	AAD	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	AAD	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	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	±9.6	
10781	AAD	5G NR (CP-OFOM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	B.38	±9.6	
10782	AAD	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	19.6	
10783	AAE	5G NR (CP-OFDM, 100% RB. 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	±9.6	
10784	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.29	±9.6	
10785	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TD0	8.40	±9.6	
10786	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.35	+9.6	
10787	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.44	±9.6	
10788	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	SG NR FR1 TDD	8.39	+9.6	
10789	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.37	+9.6	
10790	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	SG NR FR1 TOD	8.30	19.6	
10791	AAE	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.83	±9.6	
10792	AAD	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.92	±9.6	
10793	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.95	±9.6	
10794	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	19.6	
10795	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.84	±9.6	
10796	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 KHz)	5G NR FR1 TDD	7.82	±9.6	
0797	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.01	±9.6	
10798	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	±9.6	
10799	AAD	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	7.93	19.6	
10801	AAD	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	+9.6	
0802	AAD	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.87	19.6	
0803	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±9.6	
0805	AAD	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6	
0806	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.37	±9.6	
0809	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	19.6	
0810	AAD	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	19.6	
0812	AAD	5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FRI TOD	8.35	±9.6	
0817	AAE	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FRI TDD	8.35	±9.6	
0818	AAD	5G NR (CP-QFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6	
0819	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		
0821	AAD	5G NR (CP-QFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.5	
10822	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)			±9.6	
10823	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.6	
10824	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.36	±9.6	
10825	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)		8.39	±9.6	
0827	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.6	
10828	AAD	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.42	±9.6	
	nens	Security of Suff Innue up! an wus! Mast' an vus!	5G NR FR1 TDD	8.43	±9.6	

Certificate No: EUmm-9643_Aug23

Page 15 of 18

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.



Page: 48 of 72

EUmmWV4 - SN:9643 August 04, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE K =
0829	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 50 kHz)	5G NR FR1 TDD	8.40	±9.6
0830	AAD	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TOD	7.63	±9.6
0831	AAD	5G NR (CP-OFDM, 1 RB. 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.73	±9.6
0832	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.74	19.6
0833	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	19.6
0834	AAD	5G NR (CP-QFDM, 1 RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.75	±9.6
0835	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz)	SG NR FR1 TDD	7.70	19.6
0836	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)			
0837	AAD	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 KHz)	5G NR FR1 TDD	7.66	±9.6
0839	AAD		5G NR FR1 TDD	7.68	±9.6
		5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz).	5G NR FR1 TDD	7.70	±9.6
0840	AAD	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)	SG NR FR1 TDD	7.67	±9.6
0841	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 50 kHz)	5G NR FR1 TDD	7.71	±9.6
0843	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.49	±9.6
0844	AAD	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±9.6
0846	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	B.41	±9.6
0854	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±9.€
0855	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 80 kHz)	5G NR FR1 TDD	8.36	19.6
0.856	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	
0857	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)			±9.6
0858	AAD		5G NR FR1 TDD	8.35	±9.6
0859	AAD	5G NR (CP-OFDM, 100% RB. 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	±9.6
		5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 80 kHz)	5G NR FR1 TDD	8.34	±9.6
0860	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	B.41	±9.8
0861	AAD	5G NR (CP-QFDM, 100% RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.40	±9.6
0863	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
0864	AAD	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	+9.6
0865	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	+9.6
0866	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0868	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.89	±9.6
0869	AAE	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 KHz)	5G NR FR2 TDD	5.75	
0870	AAF	5G NR (DFT-e-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)			±9.6
0871	AAE	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.86	±9.6
	AAE		5G NR FR2 TDD	5.75	±9.6
0872		5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.52	±9.6
0873	AAE	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	5.61	±9.6
0874	AAE	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	±9.6
0875	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	±9.6
0876	AAE	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.39	±9.6
0877	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	7.95	19.6
0878	AAE	5G NR (CP-QFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	SG NR FR2 TDD	8.41	±9.€
0879	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.12	±9.6
0880	AAE	5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.38	±9.6
0881	AAE	5G NR (DFT:s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	
0882	AAE	5G NR (DFT.s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)			±9,6
0883	AAE	5G NR (DFT:s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.96	±9.6
0884	AAE		5G NR FR2 TOD	6.57	±9.6
		5G NR (DFT-g-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.53	±9.6
0885	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	±9.6
9880	AAE	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	±9.6
0887	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	SG NR FR2 TDD	7.78	19.6
8880	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.35	±9.6
0889	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.02	±9.€
0680	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.40	±9.6
1680	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.13	±9.6
892	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	B.41	
0897	AAC	5G NR (DFT-s-OFDM. 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FRI TDD		±9.6
1898	AAB	5G NR (DFTs-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)		5,66	±9.6
0899	AAB	5G NR (DFTs-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	±9.6
0000	AAB		50 NR FR1 TD0	5.67	±9,6
900	AAB	SG NR (DFT #-OFDM, # RB, 20 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.68	±9.€
		5G NR (DFT-s-OFDM, 1 RB, 25MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
902	AAB	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0903	AAB	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0904	AAB	5G NR (DFTs-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TOD	5.68	±9.6
905	AAB	5G NR (DFT:s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.€
0906	AAB	5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	19.6
0907	AAC	5G NR (DFT-s-OFDM, 50% RB, 5MHz, QPSK, 30kHz)	5G NR FR1 TDD	5.78	
0908	AAB	5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)			19.6
0909	AAB		5G NR FR1 TDD	5.93	±9,6
		5G NR (DFT4-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.96	19.6
0910	AAB	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	±9.6

Certificate No: EUmm-9643_Aug23

Page 16 of 18

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 49 of 72

EUmmWV4 - SN:9643

August 04, 2023

	Rev	Communication System Name	Group	PAR (dB)	Unce k =
	AAB	5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	19.6
	AAB	5G NR (DFFs-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
	AAB	5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
	AAB	5G NR (DFT-s-OFDM, 50% RB, 50 MHz, OPSK, 30 kHz)	5G NR FR1 TDD	5.85	+9.6
	AAB	5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	±9.6
	AAB	5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	19.6
0917	AAB	5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94	±9.6
0918	AAC	5G NR (DFT-s-OFDM, 100% RB, 5MHz, QPSK, 30kHz)	5G NR FR1 TDD	5.86	±9.6
0919	AAB	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86	±9.6
0920	AAB	5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	±9.6
0921	AAB	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
0922	AAB	5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.82	±9.6
0923	AAB	5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
0924	AAB	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.84	+9.6
0925	AAB	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.95	+9.6
0926	AAB	5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	12410
0927	AAB	5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD		±9.6
0928	AAC	5G NR (DFT-s-OFDM, 1 RB, 5MHz, QPSK, 15kHz)		5.94	19.6
0929	AAC	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	±9.6
	AAC	SG NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	19.6
	AAC	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	196
	AAC	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
	AAC	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15kHz)	5G NR FR1 FDD	5.51	±9.6
	AAC	SC NR (DFT-S-OFDM, 1 RB, 30 MHZ, QFSK, 15 KHZ)	5G NR FR1 FDD	5.51	±9.6
	AAD	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	19.6
	AAC	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.51	±9.6
	AAC	5G NR (DFT-s-OFDM, 50% RB, 5MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	±9.6
		5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.77	±9.6
	AAC	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	±9.6
	AAC	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.82	±9.6
		5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.89	19.6
	AAC	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	±9.6
	AAC	5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	±9.6
	AAD	6G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.95	=9.6
	AAC	5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.81	±9.6
	AAC	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	±9.6
	AAC	5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	±9.6
	AAC	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	19.6
	AAC	5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FRI FDD	5.94	19.6
	AAC	5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz).	5G NR FR1 FDD	5.87	19.5
	AAC	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	19.6
	DAA	5G NR (DFT-e-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.92	±9.6
952	AAA	5G NR DL (CP-OFDM, TM 3.1, 5MHz, 64-QAM, 15kHz)	5G NR FR1 FDD	8.25	±9.6
953	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.15	±9.6
954	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.23	±9.6
955	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.42	
956	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.14	±9.6
957	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.31	±9.6
958	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	SG NR FR1 FDD		19.6
959	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.61	±9.6
	AAC	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)		8.33	±9.6
	AAB	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 84-QAM, 15 kHz)	5G NR FR1 TDD	9.32	±9.6
	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.36	±9.6
	AAB	5G NR DL (CP-OFDM, TM 3.1, 13 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.40	±9.6
964	AAC	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.55	±9.6
	AAB	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.29	±9.6
	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.37	±9.6
	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.55	±9.6
	AAB	5G NR DL (CP-OFDM, TM 3.1, 20MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	9.42	19.6
	HAA	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	9:49	±9.6
	AAB		SG NR FR1 TDD	11.59	±9.6
	AAB	5G NR (DFT=-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	9.06	±9.6
		5G NR (CP-OFDM, 100% RB, 100 MHz, 255-QAM, 30 kHz)	5G NR FRI TDD	10.28	±9.6
	AAA.	ULLA BDR	ULLA	1,16	±9.6
2/0/3	AAA	ULLA HDR4	ULLA	8.58	19.6
	AAA.	ULLA HDR8	ULLA	10.32	±9.6
	AAA	ULLA HDRp4	ULLA	3.19	±9.6
982 /	AAA	ULLA HDRp8	ULLA	3.43	±9.6

Certificate No: EUmm-9643_Aug23

Page 17 of 18

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.

台灣檢驗科技股份有限公司



Page: 50 of 72

EUmmWV4 - SN:9643

August 04, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE 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	19.6
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	19.6
10989	AAA	5G NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.33	19.6
10990	AAA	5G NR DL (CP-OFDM, TM 3.1, 90 MHz, 64 QAM, 30 kHz)	5G NR FR1 TDO	9.52	±9.6
11003	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	10.24	±9.6
11004	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz)	5G NR FR1 TD0	10.73	±9.6
11005	AAA	5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 84-QAM, 15 kHz)	5G NR FR1 FDD	8.70	±9.6
11.006	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.55	±9.6
11007	AAA	5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.46	±9.6
11008	AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.51	±9.6
11009	AAA	5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	5.76	±9.6
11010	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.95	±9.6
11011	AAA	5G NR DL (CP-QFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.96	±9.6
11012	AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.68	+9.6
11013	AAA	IEEE 802.11be (320 MHz, MCS1, 99pc duty cycle)	WLAN	8.47	19.6
11014	AAA	IEEE 802.11be (320 MHz, MCS2, 99pc duty cycle)	WLAN	8.45	19.6
11015	AAA	IEEE 802.11be (320 MHz, MCS3, 99pc duty cycle)	WLAN	8.44	±9.6
11016	AAA	IEEE 802.11be (320 MHz, MCS4, 99pc duty cycle)	WLAN	8.44	±9.6
11017	AAA	IEEE 802.1Tbe (320 MHz, MCS5, 99pc duty cycle)	WLAN	8.41	±9.6
11018	AAA	IEEE 802.11be (320 MHz, MCS6, 99pc duty cycle)	WIAN	8.40	±9.6
11019	AAA	IEEE 802.11be (320 MHz, MCS7, 99pc duty cycle)	WLAN	8.29	49.6
11020	AAA	IEEE 802.11be (320 MHz, MCS8, 99pc duty cycle)	WLAN	8.27	±9.6
11021	AAA	IEEE 802.11be (320 MHz, MCS9, 99pc duty cycle)	WLAN	8.46	±9.6
11022	AAA	IEEE 802.11be (320 MHz, MCS10, 99pc duty cycle)	WLAN	8.36	=9.6
11023	AAA	IEEE 802.11be (320 MHz, MCS11, 99pc duty cycle)	WLAN	8.09	±9.6
11024	AAA	IEEE 802 11be (320 MHz, MCS12, 99pc duty cycle)	WLAN	8.42	±9.6
11025	AAA	IEEE 802.11be (320 MHz, MCS13, 99pc duty cycle)	WLAN	8.37	±9.6
11026	AAA	IEEE 802.11be (320 MHz, MCS0, 99pc duty cycle)	WLAN	8.39	19.6

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: EUmm-9643_Aug23

Page 18 of 18

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 51 of 72

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





Schweizerischer Kallbrierdie Service suisse d'étalonnage Servizio svizzero di taratura 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

SGS Taoyuan City

Certificate No.

EX-7823 Aug23

CALIBRATION CERTIFICATE

Object

EX3DV4 - SN:7823

QA CAL-01.v10, QA CAL-12.v10, QA CAL-14.v7, QA CAL-23.v6,

QA CAL-25.v8

Calibration procedure for dosimetric E-field probes

Calibration date

August 11, 2023

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate. All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3) °C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP2	SN: 104778	30-Mar-23 (No. 217-03804/03805)	Mar-24
Power sensor NRP-Z91	SN: 103244	30-Mar-23 (No. 217-03804)	Mar-24
OCP DAK-3.5 (weighted)	SN: 1249	20-Oct-22 (OCP-DAK3,5-1249 Oct22)	Oct-23
OCP DAK-12	SN: 1016	20-Oct-22 (OCP-DAK12-1016 Oct22)	Oct-23
Reference 20 dB Attenuator	SN: CC2552 (20x)	30-Mar-23 (No. 217-03809)	Mar-24
DAE4	SN: 660	16-Mar-23 (No. DAE4-660 Mar23)	Mar-24
Reference Probe ES3DV2	SN: 3013	06-Jan-23 (No. ES3-3013 Jan23)	Jan-24

Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-22)	In house check: Jun-24
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-22)	In house check: Oct-24

Function Calibrated by Joanna Lleshai Laboratory Technician Technical Manager

Issued: August 11, 2023
This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: EX-7823_Aug23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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

台灣檢驗科技股份有限公司



Page: 52 of 72

Calibration Laboratory of Schmid & Partner Engineering AG





- Service suisse d'étalonnage Servizio svizzero di taratura Swiss Calibration Service C

Accreditation No.: SCS 0108

Glossary

tissue simulating liquid sensitivity in free space sensitivity in TSL / NORMx,y,z NORMx,y,z ConvF diode compression point CF

A. B. C. D

diode compression point crest factor (1/duty_cycle) of the RF signal modulation dependent linearization parameters φ rotallon around probe axis ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta=0$ is Polarization φ Polarization θ

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 865684, "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 ConvF)
- below Convr.].

 NORM(f)x,x/= NORMx,y,z * 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
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal. DCP

- 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.

 AR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics.

 Ax,y,z; Bx,y,z; Cx,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.

 Corn# and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for 1 < 800 MHz) and inside waveguide using analytical field distributions based on power measurements for 1 > 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 improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,yz * Conver* 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 ±50 MHz to ±100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch
- 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-7823 Aug23 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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



Page: 53 of 72

August 11, 2023

Parameters of Probe: EX3DV4 - SN:7823

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k = 2)
Norm $(\mu V/(V/m)^2)$ A	0.59	0.62	0.63	±10.1%
DCP (mV) B	109.0	104.5	105.0	±4.7%

Calibration Results for Modulation Response

UID	Communication System Name		dB	B dB√μV	С	dB	WR mV	Max dev.	Max Unc ^E k = 2
0	CW	X	0.00	0.00	1.00	0.00	149.0	±3.1%	±4.7%
		Y	0.00	0.00	1.00		125.2		
		Z	0.00	0.00	1.00		119.1		
10352	Pulse Waveform (200Hz, 10%)	X	1.48	60.35	6.11	10.00	60.0	±2.7%	±9.6%
		Y	1.41	60.05	5.94		60.0	-	-011
		Z	1.53	60.77	6.24		60.0		
10353	Pulse Waveform (200Hz, 20%)	X	0.80	60.00	4.70	6.99	80.0	±2.6%	±9.69
		Y 20.00 74.00 9		9.00		80.0			
		2	20.00	74.00	9.00		80.0		
10354	Pulse Waveform (200Hz, 40%)	X	0.02	129.12	0.09	3.98	95.0	±2.5%	±9.69
		Y	0.12	142.04	0.14		95.0		
		Z	0.00	124.56	0.36	-	95.0		
10355	Pulse Waveform (200Hz, 60%)	X	3.65	159.99	2.03	2.22	120.0	±1.6%	±9.69
		Y	4.11	159.65	16.46		120.0		
		Z	2.01	160.00	1.14		120.0		
10387	QPSK Waveform, 1 MHz	X	0.50	63.26	11.67	1.00	150.0	±4.1%	±9.69
		Y	0.46	63.60	12.71		150.0		
		2	0.47	61.98	11.09		150.0		
10388	QPSK Waveform, 10 MHz	X	1.28	65.55	13.52	0.00	150.0	±0.8%	±9.69
		Y	1.27	66.44	13.89	-	150.0	20.00	
	Appendix and the second states	Z	1.35	65.87	13.77		150.0		
10396	64-QAM Waveform, 100 kHz	X	1.79	65.62	16.39	3.01	150.0	±1.1%	±9.69
		Y	1.64	64.28	15.97	0.00	150.0	1000	
		Z	1.64	63.88	15.72		150.0	1	
10399	64-QAM Waveform, 40 MHz	X	2.76	66.12	14.93	0.00	150.0	±2.4%	±9.69
		Y	2.73	66.41	15.17	1	150.0		
		Z	2.84	66.29	15.09		150.0	1. 74	
10414	WLAN CCDF, 64-QAM, 40 MHz	X	3.91	66.58	15.49	0.00	150.0	±3.9%	±9.69
		Y	3.76	66.67	15.52	1000	150.0	Dr. Col	
		Z	3.85	65.97	15.29		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%.

Certificate No: EX-7823 Aug23

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.

A The uncertainties of Norm X.Y.Z do not affect the E²-field uncertainty inside TSL (see Plages 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.



Page: 54 of 72

EX3DV4 - SN:7823

August 11, 2023

Parameters of Probe: EX3DV4 - SN:7823

Sensor Model Parameters

	C1 fF	C2 fF	ν-1	T1 ms V ⁻²	T2 ms V ⁻¹	T3 ms	T4 V-2	T5 V-1	T6
X	9.6	69.39	33.45	2.44	0.00	4.92	0.67	0.00	1.00
y.	7.9	57.24	33.73	2.52	0.00	4.90	0.28	0.02	1.00
2	10.2	75.17	34.77	3.61	0.00	4.92	0.22	0.05	1.00

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle	29.9°
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

Certificate No: EX-7823 Aug23

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.



Page: 55 of 72

EX3DV4 - SN:7823 August 11, 2023

Parameters of Probe: EX3DV4 - SN:7823

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity ^F (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k = 2)
750	41.9	0.89	8.89	9.81	8.98	0.42	1.27	±12.0%
835	41.5	0.90	8.51	9.00	9.06	0.41	1.27	±12.0%
900	41.5	0.97	8.54	8.63	8.76	0.40	1.27	±12.0%
1450	40.5	1.20	7.99	8.48	8.22	0.51	1.27	±12.0%
1750	40.1	1.37	7.92	8.36	8.26	0.28	1,27	±12.0%
1900	40.0	1.40	7.42	7.90	7.74	0.31	1.27	±12.0%
2000	40.0	1.40	7.29	7.74	7.59	0.32	1.27	±12.0%
2300	39.5	1.67	7.07	7.56	7.39	0.33	1.27	±12.0%
2450	39.2	1.80	6.86	7.33	7.16	0.32	1.27	±12.0%
2600	39.0	1.96	6.76	7.23	7.06	0.31	1,27	±12.0%
3300	38.2	2.71	6.45	6.94	6.76	0.36	1.27	±14.0%
3500	37.9	2,91	6.38	6.88	6.70	0.37	1.27	±14.0%
3700	37.7	3.12	6.36	6.83	6.66	0.37	1.27	±14.0%
3900	37.5	3.32	6.30	6.76	6.60	0.38	1.27	±14.0%
4100	37.2	3.53	6.16	6.60	6.45	0.39	1,27	±14.0%
4200	37.1	3.63	6.08	6.53	6.37	0.39	1.27	±14.0%
4400	36.9	3.84	6.01	6.45	6.30	0.39	1.27	±14.0%
4600	36.7	4.04	5,94	6.38	6.22	0.39	1,27	±14.0%
4800	36.4	4.25	5.88	6.31	6.15	0.39	1.27	±14.0%
4950	36.3	4,40	5.59	6.02	5.85	0.44	1.36	±14.0%
5200	36.0	4.66	5.30	5.71	5.44	0.39	1.51	±14.0%
5300	35.9	4.76	5.09	5.48	5.33	0.39	1.55	±14.0%
5600	35.5	5.07	4.45	4.79	4.58	0.43	1.67	±14.0%
5800	35.3	5.27	4.57	4.91	4.71	0.38	1.84	±14.0%

[©] Frequency validity above 300 MHz of ±100 MHz only applies for DASY v4.4 and higher (see Page 2), siss it is restricted to ±50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 500 MHz is ±10.25, 40,50 and 70 MHz is 67.20 MHz. respectively. Validity of ConvF assessed at 6MHz is 4-9MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ±10 MHz.

The probes are calibrated using tissue simulating liquide (TSL) that deviate for rand to by less than ±5% from the target values (spically better than ±3%) and are valid for TSL with deviations from the target of less than ±5% are used, the calibration uncertainties are 11.1% for 07 - 3 GHz and 13.1% for 3 G 6 MHz.

Certificate No: EX-7823 Aug23

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.

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 half the probe tip diameter from the boundary.



Page: 56 of 72

EX3DV4 - SN:7823

August 11, 2023

Parameters of Probe: EX3DV4 - SN:7823

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity ^F (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k = 2)
6500	34.5	6.07	4.94	5.37	5.24	0.20	2.00	±18.6%
7000	33.9	6.65	4.91	5.51	5.32	0.20	2.00	±18.6%

Certificate No: EX-7823 Aug23

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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

www.sqs.com.tw

G. Frequency validity at 6.5 GHz is ~800+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.

Fire probes are calibrated using itsues simulating legisled (TSL) that deviate for ε and σ by less than ±10% from the target values (typically better than ±8%) and are valid for TSL with deviations of up to ±10%.

A phaiDepth are determined during calibration. SPEAG warrants that the remaining deviation us to the boundary effect after compensation is always less than ±1% for frequencies below 94%; both vectors 13-6 GHz; and below ±4% for frequencies between 8-10 GHz at any distance larger than half the probe tip diameter from the boundary.

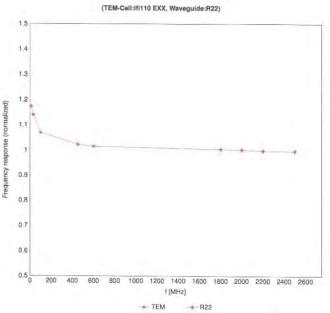


August 11, 2023

Page: 57 of 72

EX3DV4 - SN:7823

Frequency Response of E-Field



Uncertainty of Frequency Response of E-field: ±6.3% (k≈2)

Certificate No: EX-7823_Aug23

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.

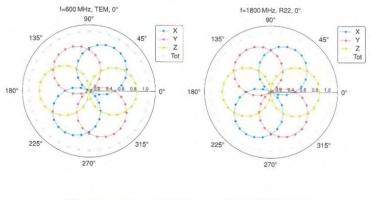
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.

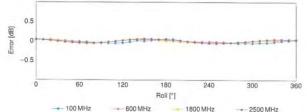


Page: 58 of 72

EX3DV4 - SN:7823 August 11, 2023

Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$





Uncertainty of Axial Isotropy Assessment: ±0.5% (k=2)

Certificate No: EX-7823_Aug23

Page 8 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.

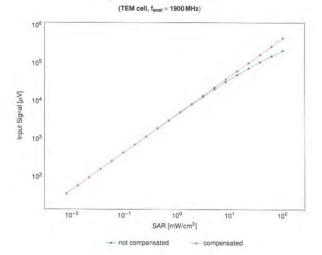
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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

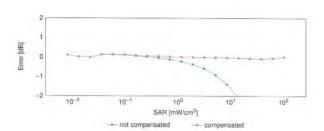


Page: 59 of 72

EX3DV4 - SN:7823 August 11, 2023

Dynamic Range f(SARhead)





Uncertainty of Linearity Assessment: ±0.6% (k=2)

Certificate No: EX-7823 Aug23 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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.

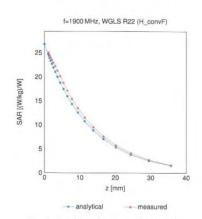


Page: 60 of 72

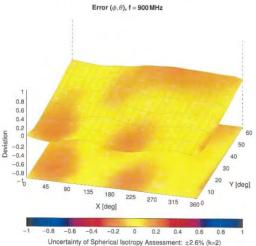
EX3DV4 - SN:7823

August 11, 2023

Conversion Factor Assessment



Deviation from Isotropy in Liquid



Certificate No: EX-7823 Aug23

Page 10 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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 61 of 72

EX3DV4 - SN:7823 August 11, 2023

Appendix: Modulation Calibration Parameters

mp	Rev	Communication System Name	Group	PAR (dB)	UncE k =
0	-	CW	CW	0.00	±4.7
010	CAB	SAR Validation (Square, 100 ms, 10 ms)	Test	10.00	19.6
0011	CAC	UMTS-FDD (WCDMA)	WCDMA	2.91	±9.6
0012	CAB	IEEE 802.11b W/Fi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	29.6
0013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	±9.6
0021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	19.6
0023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	±9.6
0024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	5.56	±9.6
0025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	±9.6
0026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	19.6
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)	ĞSM	7.78	19.6
0030	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	49.6
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	±9.6
10033	CAA	IEEE 802.15.1 Bluetooth (Pt/4-DQPSK, DH1)	Bluetooth	7.74	±9.6
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	19.8
0035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	19.6
0036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	19.6
0037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	±9.6
0038	CAA	IEEE 802 15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	±9.6
0039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	±9.6
0042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	±9.6
0044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	19.6
0048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	19.6
0049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	±9.6
0056	CAA	UMTS-TDD (TD-SCDMA, 1,28 Mcps)	TD-SCDMA	11.01	±9.6
0058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	±9.6
0059	CAB	IEEE 802.11b WIFI 2.4 GHz (DSSS, 2Mbps)	WLAN	2.12	±9.6
0060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	±9.6
0061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	±9.8
0062	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	19.6
0064	CAD	IEEE 802 11a/h WiFl 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	±9.6
0.065	CAD	IEEE 802 11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	±9.6
0006	CAD	IEEE 802 11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	±9.8
10067	CAD	IEEE 802 11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	±9.8
10068	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	
0069	CAD	IEEE 802 11a/h WIFI 5 GHz (OFDM, 54 Mbps)	WLAN		±9.6
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	10.56	±9.6
0072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)		9.83	±9.8
0073	CAB	IEEE 802 11g WIFI 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	±9.6
0074	CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9,94	±9.6
0075	CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	19.6
0075	CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	±9.6
0077	CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	±9.8
0081	CAB	CDMA2000 (1xRTT, RC3)	WLAN	11.00	±9.6
0082	CAB		CDMA2000	3.97	±9.6
0090	DAC	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	±9.6
0090	CAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	±9.6
0092	GAG	UMTS-FDD (HSDPA)	WCDMA	3,98	±9.6
8600		UMTS-FDD (HSUPA, Subtest 2)	WGDMA	3.98	±9.6
4404	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	19.8
0100	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	±9.6
0101	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.8
0102	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE FDD	6.60	±9.6
0103	CAH	LTE-TDD (SC-FDMA: 100% RB, 20 MHz, QPSK)	LIE-TOD	9.29	±9.6
0104	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	±9.6
0105	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	±9.6
0108	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5,80	±9.6
0109	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	1.9.6
0110	CAH	LTE-FDD (SC-FDMA: 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	±9.6
0111	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6,44	±9.6

Certificate No: EX-7823 Aug23 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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



August 11, 2023

8.03 8.13 8.27

WLAN

Page: 62 of 72

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
0112	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	±9.6
0113	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	±9.6
0114	CAD	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	±9.6
0115	CAD	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	19.6
0116	CAD	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	±9.6
0117	CAD	IEEE 802,11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	±9.6
0118	CAD	IEEE 802.11n (HT Mixed, 81 Mbps, 15-QAM)	WLAN	8.59	±9.6
0119	CAD	IEEE 802.11n (HT Mixed, 135 Mbps, 84-QAM)	WLAN	8.13	±9.6
0140	CAF	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	±9.6
0141	CAF	LTE-FDD (SC-FDMA, 100% RB, 15MHz, 64-QAM)	LTE-FDD	6.53	±9.6
0142	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
0143	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	±9.6
0144	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	±9.6
0145	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	±9.6
0.146	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	±9.6
0147	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	±9.6
0149	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	19.6
0150	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	5.60	±9.6
0151	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	±9.6
0152	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	19.6
0153	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TOD	10.05	±9.6
0154	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	±9.6
0155	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
0156	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE FDD	5.79	±9.6
0157	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	±9.6
0158	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	±9.6
0159	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	±9.6
0160	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	19.6
0161	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
0162	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	±9.6
0166	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FOD	5.46	±9.5
0167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	±9.5
0168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	19.6
0169	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	19.6
0170	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	19.6
0171	AAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	±9.6
0172	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TOD	9,21	±9.6
0173	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TOD	9.48	±9.6
0174	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
0175	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	±9.5
0176	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
0177	CAJ	LTE-FDD (SG-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	19.6
0178	CAH	LTE-FDD (SG-FDMA, 1 RB, 5MHz, 16-QAM)	LTE-FDD	6.52	19.6
0179	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	±9.5
0180	CAH	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	19.6
10181	CAF	LTE-FDD (SC-FDMA, 1 RB, 15MHz, QPSK)	LTE-FDD	5.72	19.8
0182	CAF	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	8.52	19.5
0183	AAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
0184	CAF	LTE-FDD (SC-FDMA, 1 RB, 3MHz, QPSK)	LTE-FDD	5.73	±9.5
0185	CAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	±9.6
0186	AAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
0187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	19.6
0188	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	19.6
0189	AAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	19.6
0193	CAD	IEEE 802 11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	±9.6
0194	CAD	IEEE 802 11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.09	±9.6

Certificate No: EX-7823_Aug23

EX3DV4 - SN:7823

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 63 of 72

EX3DV4 - SN:7823 August 11, 2023

-	Rev	Communication System Name	Group	PAR (dB)	UncE k =
10225	CAC	UMTS-FDD (HSPA+)	WCDMA	5.97	±9.6
10226	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9,49	±9,€
0227	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	±9.6
0228	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, OPSK)	LTE-TOD	9.22	±9.6
0229	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TOD	9.48	19.6
0230	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TOD	10.25	19.6
0231	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)			-
0232	CAH		LTE-TDD	9.19	±9.6
		LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	±9.8
0233	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
0234	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9,21	±9.6
0235	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
0236	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM).	LTE-TDD	10.25	±9.6
0237	CAH	LTE-TDD (SC-FDMA, 1 RB, 10MHz, QPSK)	LTE-TDD	9.21	±9.6
0238	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TOD	9.48	±9.6
10239	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10240	CAG	LTE-TDD (SC-FDMA, 1 RB, 15MHz, QPSK)	LTE-TDD	9.21	
10241	CAC				±9.6
		LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TOD	9.82	±9.6
0242	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	±9.6
10243	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TOD	9.46	±9.6
10244	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TOD	10.06	±9.6
10245	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	±9.6
10246	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	±9.6
10247	CAH	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 16-QAM)	LTE-TOD	9.91	+9.6
10248	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TOD	10.09	±9.6
10249	CAH	LTE-TDD (SC-FDMA, 50% RB, 5MHz, QPSK)	LTE-TOD	9.29	
10250	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)			±9.6
			LTE-TDD	9.81	±9.6
10251	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TOD	10.17	49.6
10252	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TOD	9.24	±9.6
10253	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	±9.6
10254	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10:14	±9.6
10255	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, OPSK)	LTE-TDD	9.20	±9.6
10256	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	±9.6
10257	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	±9.6
10258	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD		
10259	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)		9,34	±9.6
			LTE-TDD	9.98	±9.6
10260	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	±9,6
10261	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	±9.6
10262	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TOD	9.83	±9.6
10263	CAH	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 64-QAM)	LTE-TDD	10.16	±9.6
10264	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	±9.6
10265	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	±9.6
10266	CAH	LTE-TDD (SC-FDMA, 100% RB, 10MHz, 64-QAM)	LTE-TOD	10.07	
10267	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)			±9.6
10268	CAG		LTE-TOD	9.30	±9.6
		LTE-TDD (SC-FDMA: 100% RB; 15 MHz; 16-QAM)	LTE-TDD	10.06	±9.6
10269	CAG	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 64-QAM)	LTE-TDD	10.13	±9.6
10270	CAG	LTE-TDD (SC-FDMA, 100% RB, 15MHz, QPSK)	LTE-TDD	9.58	£9.6
10274	CAC	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	±9.6
10275	CAC	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rei8.4)	WCDMA	3.96	±9.6
10277	CAA	PHS (QPSK)	PHS	11.81	±9.6
10278	CAA	PHS (QPSK, BW 884 MHz, Rolloff 0,5)	PHS	11.81	±9.6
10279	CAA	PHS (OPSK, BW 884 MHz, Rolloff 0.38)	PHS	12.18	
10290	AAB	CDMA2000, RC1, SO55, Full Rate			±9.5
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3,91	±9.6
			CDMA2000	3.46	±9.6
10292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	±9.6
10293	AAB	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	±9.6
10295	AAB	GDMA2000, RC1, SO3, 1/8th Rate 25 tr.	CDMA2000	12.49	±9.6
10297	AAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	±9.6
10298	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	±9.6
10299	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	±9.6
10300	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 84-QAM)			
10301	AAA	IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC)	LTE-FDD	6.60	19.6
			WIMAX	12.03	±9,6
10302	AAA	IEEE 802 16e WIMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC, 3 CTRL symbols)	WiMAX	12.57	±9.6
10303	AAA	IEEE 802.16e WIMAX (31:15, 5 ms, 10 MHz, 64QAM, PUSC)	WIMAX	12.52	±9,6
10304	AAA	IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, 64QAM, PUSC)	WIMAX	11.86	±9.6
		IEEE 802.16e WIMAX (31:15, 10 ms, 10 MHz, 64QAM, PUSC, 15 symbols)	WIMAX	15.24	±9.8
10305	AAA				

Certificate No: EX-7823_Aug23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 64 of 72

EX3DV4 - SN:7823 August 11, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	
10307	AAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, QPSK, PUSC, 18 symbols)	WIMAX	14.49	±9,6
10308	AAA	IEEE 802 16e WiMAX (29:18, 10 ms, 10 MHz, 16QAM, PUSC)	WIMAX	14.46	±9.€
0309	AAA	IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, 16QAM, AMC 2x3, 18 symbols)	WIMAX	14.58	±9.6
10310	AAA	IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, QPSK, AMC 2x3, 18 symbols)	WiMAX	14.57	±9.6
10311	AAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	±9.6
10313	AAA	IDEN 1:3	IDEN	10.51	±9.6
10314	AAA	IDEN 1:6	IDEN	13.48	±9.6
10315	AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	WLAN	1.71	±9.6
10316	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 95pc duty cycle)	WLAN	8.36	±9.6
10317	AAD	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	±9.6
10352	AAA	Pulse Waveform (200Hz, 10%)	Beneric	10.00	19.6
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	19.6
10354	AAA	Pulse Waveform (200Hz, 40%)	Genetic	3.98	±9.6
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	±9.5
10356	AAA	Pulse Waveform (200Hz, 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	AAE	IEEE 802.11ac WiFi (20 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.37	±9.6
10401	AAE	IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99pc duty cycle)	WLAN	8,60	±9.6
10402	AAE	IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc duty cycle)	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	19.6
10406	AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	
10410	AAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	LTE-TOD	7.82	19.6
10414	AAA	WLAN CCDF, 64-QAM, 40 MHz			±9,6
10415	AAA	IEEE 802.11b WiFl 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	Generic WLAN	8.54	±9.6
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 5 Mbps, 99pc duty cycle)	WLAN	1.54	±9.6
10417	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10418	AAA	IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule)		8.23	±9.6
10419	AAA	IEEE 802 1/4 WIFI 2.4 GHz (DSSS-CPDM, 6 Mbps, 99pc duty cycle, Long preambule)	WLAN	8.14	±9.6
10422	AAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	WLAN	8.19	±9.6
10423	AAC	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK) IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.32	±9.5
10424	AAC		WLAN	8.47	±9.6
10425	AAC	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 84-QAM)	WLAN	8.40	±9.6
	AAC	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	±9.6
10426	AAC	IEEE 802.11n (HT Greenlield, 90 Mbps, 16-QAM)	WLAN	8.45	±9.6
10427	AAE	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	±9.6
10430	AAE	LTE-FDD (OFDMA, 5MHz, E-TM 3.1)	LTE-FDD	8,28	±9.6
10431	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	19.6
		LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.5
10433	AAD	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
10434	AAB	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA.	8.60	±9.6
10435	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2 3,4,7,8,9)	LTE-TDD	7.82	±9.6
10447	AAE	LTE-FDD (OFDMA, 5MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	±9.6
10448	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Glippin #4%)	LTE-FDD	7.53	±9.6
10449	AAD	LTE-FDD (QFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	LTE-FDD	7.51	±9.6
10450	AAD	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	±9.6
10451	AAB	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	±9.6
10453	AAE	Validation (Square, 10 ms, 1 ms)	Test	10.00	±9.6
10456	AAC	IEEE 802.11ac WIFI (160 MHz, 84-QAM, 99pc duty cycle)	WLAN	8.63	±9.6
10457	AAB	UMTS-FDD (DC-HSDPA)	WCDMA	8.62	19.6
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	±9.€
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	±9.6
10460	AAB	UMTS-FDD (WCDMA, AMR)	WCDMA	2,39	±9.6
0461	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2.3,4.7,8,9)	LTE-TOD	7.82	±9.6
0462	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.30	±9.6
10463	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	±9.6
10464	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	19.5
10465	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.32	19.0
10468	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.57	19.6
10467	AAG	LTE-TDD (SC-FDMA, 1 RB, 5MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	19.6
10468	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.32	19.6
10469	AAG	LTE-TDD (SC-FDMA 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.56	
10470	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, GPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.€
10471	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subtrame=2.3.4.7.8.9)			±9.6
	Co. 103	The rest is not remark, to Committee 200 remains at 1,78,9	LTE-TDD	8.32	±9,6

Certificate No: EX-7823_Aug23

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.

f (886-2) 2298-0488



Page: 65 of 72

EX3DV4 - SN:7823 August 11, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	Unce k =
10472	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
0473	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2.3,4,7,8,9)	LTE-TDD	7.82	±9.6
0474	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.32	±9.6
10475	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.57	±9.6
0477	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.€
0478	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2.3,4,7,8,9)	LTE-TDD	8.57	+9.6
0479	AAG	LTE-TOD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
0480	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.18	19.6
0481	AAC	LTE-TDD (SC-FDMA, 50% RB, 1,4 MHz, 64-QAM, UL Subframe=2,3,4,7,8.9)	LTE-TDD	8.45	±9.6
0482	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2.3.4.7.8.9)	LTE-TOD	7.71	±9.6
0483	AAD	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 16-QAM, UL Subframe=2,3,4,7.8,9)	LTE-TDD	8.39	±9.6
0484	AAD	LTE-TDD (SG-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.47	±9.6
0485	AAG	LTE-TDD (SC-FDMA, 50% RB, 5MHz, QPSK, UL Subframe=2.3.4.7.8.9)	LTE-TDD	7.59	+9.5
0486	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.38	±9.6
0487	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TOD	8.60	±9.6
0.488	AAG	LTE-TDD (SC-FDMA, 50% RB, 16MHz, QPSK, UL Subframe+2,3,4,7,8,9)	LTE-TDD	7.70	±9.6
0489	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4.7,8,9)	LTE-TOD	8.31	
0490	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
0491	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	
0492	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,6,9)		110.4	±9.6
0493	AAF		LTE-TDD	8.41	±9.6
0494	AAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	±9,6
		LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TOD	7.74	±9.6
0495	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.37	±9.6
0496	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
0497	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	±9.6
0498	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.40	±9.6
0499	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.68	±9.6
0500	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	±9.6
0501	AAD	LTE-TDD (SC-FDMA: 100% RB, 3MHz: 16-QAM: UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.44	±9.6
0502	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz. 64-QAM, UL Subframe=2,3,4,7,8.9)	LTE-TOD	8.52	19.6
0503	AAG	LTE-TDD (SC-FDMA, 100% RB, 5MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.72	±9.6
0504	AAG	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	±9.6
0505	AAG	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 64-QAM, UL Subframe=2.3.4.7.8.9)	LTE-TDD	8.54	±9.6
0508	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
0507	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8.9)	LTE-TOD	8.36	±9.6
0508	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	±9.6
0509	AAF	LTE-TDD (SC-FDMA, 100% RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TOD	7.99	±9.6
0510	AAF	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 16-QAM, UL Subframe=2.3.4.7.6.9)	LTE-TDD	8,49	±9.6
0511	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.51	±9.6
0512	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	
0513	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD		±9.6
0514	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subtrame=2,3,4,7,8,9)		8.42	±9.6
0515	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	LTE-TDD	8.45	±9,6
0516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	WLAN	1,58	±9.6
0517	AAA		WLAN	1.57	±9.6
0518	AAC	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	WLAN	1.58	±9.6
	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.23	19.6
0519		IEEE 802.11a/h WIFI 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.39	±9.6
0520	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8/12	±9.6
0521	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	WLAN	7.97	±9.6
0522	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.45	±9.6
0523	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	WLAN	80.8	±9.6
0524	AAC	IEEE 802.11a/h WiFl 5 GHz (OFDM; 54 Mbps, 99pc duty cycle)	WLAN	8.27	±9.6
0525	AAC	IEEE 802.11ac WiFi (20 MHz, MCS0, 99pc duty cycle)	WLAN	8.36	±9.6
0526	AAC	IEEE 802.11ac WiFi (20 MHz, MCS1, 99pc duty cycle)	WLAN	8.42	±9.6
0527	AAC	IEEE 802.11ac WiFi (20 MHz, MCS2, 99pc duty cycle)	WLAN	8.21	±9.6
0528	AAC	IEEE 802.11ac WIFI (20 MHz, MCS3, 99pc duty cycle)	WLAN	8.36	19.6
0529	AAC	IEEE 802,11ac WiFi (20 MHz, MCS4, 99pc duty cycle)	WLAN	8.36	±9.6
0531	AAC	IEEE 802.11ac WiFi (20 MHz, MCS6, 99pc duty cycle)	WLAN	8.43	±9.5
0532	AAC	IEEE 802.11ac WiFi (20 MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6
0533	AAC	IEEE 802.11ac WiFi (20 MHz, MCS8, 99pc duty cycle)	WLAN	8.38	+9.6
0534	AAC	IEEE 802,11ac WiFi (40 MHz, MCS0, 99pc duty cycle)	WLAN	8.45	±9.6
0535	AAC	IEEE 802,11ac WiFi (40 MHz, MCS1, 99pc duty cycle)	WLAN	8.45	±9.6
0535	AAC	IEEE 802.11ac WiFi (40 MHz. MCS2, 99pc duty cycle)	WLAN	8.32	19.6
0537	AAC	IEEE 802.11ac WIF1 (40 MHz, MCS3, 99pc duty cycle)	WLAN	8.32 8.44	±9.6
0538	AAC	IEEE 802.11ac WIFI (40 MHz, MCS4, 99pc duty cycle)	WLAN		
0540		IEEE 802.11ac WIFI (40 MHz, MCS4, 99pc duty cycle)		8.54	±9.6
	MMG	TIELE OVER THE WITH THE MINE MUSE, SUPE GUTY CYCLE)	WLAN	8,39	±9

Certificate No: EX-7823_Aug23 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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.



Page: 66 of 72

EX3DV4 - SN:7823 August 11, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
10541	AAC	IEEE 802.11ac WIFI (40 MHz, MCS7, 99pc duty cycle)	WLAN	8.46	±9.6
10542	AAC	IEEE 802.11ac WIFI (40 MHz, MCS8, 99pc duty cycle)	WLAN	8.65	±9.6
10543	AAC	IEEE 802.11ac WiFi (40 MHz, MCS9, 99pc duty cycle)	WLAN	8.65	±9,6
0544	AAC	IEEE 802 11ac WIFI (80 MHz, MCS0, 99pc duty cycle)	WLAN	8,47	+9.6
0545	AAC	IEEE 802.11ac WIFI (80 MHz, MCS1, 99pc duty cycle)	WLAN	8.55	+9.6
0546	AAC	IEEE 802.11ac WIFI (80 MHz, MCS2, 99pc duty cycle)	WLAN		
0547	AAC		110000	8.35	±9.6
		IEEE 802.11ac WIFI (80 MHz, MCS3, 99pc duty cycle)	WLAN	8.49	±9,6
0548	AAC	IEEE 802.11ac WIFI (80 MHz, MCS4, 99pc duty cycle)	WLAN	8.37	±9.6
0550	AAC	IEEE 802.11ac WiFi (80 MHz, MCS6, 99pc duty cycle)	WLAN	8.38	±9.6
0551	AAC	IEEE 802.11ac WIFI (80 MHz, MCS7, 99pc duty cycle)	WLAN	8.50	±9.6
0552	AAC	IEEE 802.11ac WiFi (80 MHz, MCS8, 99pc duty cycle)	WLAN	8.42	±9.6
0553	AAC	IEEE 802,11ac WiFi (80 MHz, MCS9, 99pc duty cycle)	WLAN	8.45	±9.6
0554	AAD	IEEE 802.11ac WIFI (160 MHz, MCS0, 99pc duty cycle)	WLAN	8.48	+9.6
0555	AAD	IEEE 802.11ac WiFi (160 MHz, MCS1, 99pc duty cycle)	WLAN	8.47	±9.6
0556	AAD	IEEE 802 11ac WIFI (160 MHz, MCS2, 99pc duty cycle)	WLAN	8.50	+9.6
0557	AAD	IEEE 802.11ac WiFi (160 MHz, MCS3, 99pc duty cycle)	WLAN	8.52	±9.6
0558	AAD	IEEE 802.11ac WIFI (160 MHz, MCS4, 99pc duly cycle)	WLAN	8,61	+9.6
0560	AAD	IEEE 802.11ac WIF (160 MHz, MCS6, 99pc duty cycle)	WLAN		
0.561	AAD			8.73	±9.6
		IEEE 802.11ac WIFI (160 MHz, MCS7, 99pc duty cycle)	WLAN	8.56	±9.6
0562	AAD	IEEE 802.11ac WiFi (160 MHz, MCS8, 99pc duty cycle)	WLAN	8.69	±9,6
0563	AAD	IEEE 802,11ac WiFi (160 MHz, MCS9, 99pc duty cycle)	WLAN	8.77	±9,6
0564	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.25	±9.6
0565	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.45	±9.6
0566	AAA	IEEE 802 11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8,13	±9.6
0567	AAA	IEEE 802.11g WiFl 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	WLAN	8.00	19.6
0568	AAA	IEEE 802 11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.37	+9.6
0569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.10	±9.6
0570	AAA	IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	WLAN		
0571	AAA	IEEE 802.11b WIFI 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)		8.30	19.6
	AAA		WLAN	1.99	19.6
0572		IEEE 802.11b WiFi 2.4 GHz (DSSS, 2Mbps, 90pc duty cycle)	WLAN	1.99	±9.6
0573	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	WLAN	1.98	±9.6
0574	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	WLAN	1.98	±9.5
0575	AAA	IEEE 802 11g WiFl 2 4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	±9.6
0576	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	19.8
0577	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6
0578	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	±9.6
0579	AAA	IEEE 802.11g WiFl 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	WLAN	3.36	1,9.6
0580	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	19.6
0581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	19.6
0582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	
0583	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)			±9.6
0584	AAC		WLAN	8.59	±9.6
0585		IEEE 802.11a/h WIFL5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	±9.6
	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6
0586	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	±9.6
0.587	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	±9.6
0588	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps; 90pc duty cycle)	WLAN	8.76	±9.6
0589	AAC	IEEE 802:11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±9.6
0590	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±9.5
0591	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc duty cycle)	WLAN	8.63	19.6
0592	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 90pc duty cycle)	WLAN	8.79	±9.6
0593	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS2, 90pc duty cycle)	WLAN	8.64	±9.6
0594	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle)	WLAN	8.74	
0595	AAC	IEEE 802 11n (HT Mixed, 20 MHz, MCS4, 90pc duty cycle)			±9:6
0596	AAC		WLAN	8,74	±9.6
0595	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc duty cycle)	WLAN	8.71	±9.6
		IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 90pc duty cycle)	WLAN	8.72	±9.6
0598	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc duty cycle)	WLAN	8.50	3.9.6
0599	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc duty cycle)	WLAN	8.79	±9.6
0600	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc duty cycle)	WLAN	8.88	±9.6
0601	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc duty cycle)	WLAN	8.82	±9.6
0602	AAC	IEEE 802 11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle)	WLAN	8.94	±9.6
0603	AAC	IEEE 802 11n (HT Mixed, 40 MHz, MCS4, 90pc duty cycle)	WLAN	9.03	±9.6
0604	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle)	WLAN	8.76	19.6
0605	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc duty cycle)	WLAN		
0606	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS7, 90pc duty cycle)		8.97	19.6
0607	AAC		WLAN	9.82	19.6
0608		IEEE 802.11ac WiFi (20 MHz, MCS0, 90pc duty cycle)	WLAN	8.64	19.8
	AAC	IEEE 802.11ac WiFi (20 MHz, MCS1, 90pc duty cycle)	WLAN	8.77	±9.6

Certificate No: EX-7823 Aug23 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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.



Page: 67 of 72

EX3DV4 - SN:7823 August 11, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k = 2
10609	AAC	IEEE 802.11ac WIFI (20 MHz, MCS2, 90pc duty cycle)	WLAN	8.57	±9.6
10610	AAC	IEEE 802.11ac WiFi (20 MHz, MCS3, 90pc duty cycle)	WLAN	8.78	±9.6
10611	AAC	IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc duty cycle)	WLAN	8.70	±9.6
10612	AAC	IEEE 802.11ac WIFI (20 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6
10613	AAC	IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc duty cycle)	WLAN	8.94	±9.6
10614	AAC	IEEE 802.11ac WIFI (20 MHz, MCS7, 90pc duty cycle)	WLAN	8.59	±9.6
10615	AAC	IEEE 802.11ac WiFi (20 MHz, MCS8, 90pc duty cycle)	WLAN	8.82	±9.6
10616	AAC	IEEE 802,11ac WiFi (40 MHz, MCS0, 90pc duty cycle)	WLAN	8.82	±9.6
10617	AAC	IEEE 802.11ac WiFi (40 MHz, MCS1, 90pc duty cycle)	WLAN	8.81	±9.6
10618	AAC	IEEE 802.11ac WiFi (40 MHz, MCS2, 90pc duty cycle)	WLAN	8.58	+9.6
10619	AAC	IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc duty cycle)	WLAN	8.86	±9.6
10620	AAC	IEEE 802.11ac WiFi (40 MHz, MCS4, 90pc duty cycle)	WLAN	8.87	+9.6
10621	AAC	IEEE 802.11ac WiFI (40 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	19.6
10622	AAC	IEEE 802:11ac WiFi (40 MHz, MCS6, 90pc duty cycle)	WLAN	3.68	19.6
10623	AAC	IEEE 802 11ac WIFI (40 MHz, MCS7, 90pc duty cycle)	WLAN	8.82	19.6
10624	AAC	IEEE 802.11ac WiFI (40 MHz, MCS8, 90pc duty cycle)	WLAN	8.96	19.8
10625	AAC	IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc duty cycle)	WLAN	8.96	19.6
10625	AAC	IEEE 802.11ac WIFI (80 MHz, MCS0, 90pc duty cycle)	WLAN	8.83	
10627	AAC	IEEE 802.11ac WIF (80 MHz, MCS1, 90pc duty cycle)	WLAN	8.88	±9.6
10628	AAC	IEEE 802,11ac WIF (80 MHz, MCS2, 90pc duty cycle)	WLAN	8.71	
10629	AAC	IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc duty cycle)			±9.8
10630	AAC		WLAN	8.85	±9.6
	AAC	IEEE 802.11ac WIFI (80 MHz, MCS4, 90pc duty cycle)	WLAN	8.72	19.6
10631	AAC	IEEE 802.11ac WIFI (80 MHz, MCS5, 90pc duty cycle)	WLAN	8.81	±9.6
10632	AAC	IEEE 802.11ac WIFI (80 MHz, MCS6, 90pc duty cycle)	WLAN	8.74	±9.6
		IEEE 802,11ac WiFi (80 MHz, MCS7, 90pc duty cycle)	WLAN	8.83	19.8
10634	AAC	IEEE 802,11ac WiFi (80 MHz, MCS8, 90pc duty cycle)	WLAN	8.80	±9.6
10635	AAC	IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc duty cycle)	WLAN	8.81	±9.6
10636	AAD	IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc duty cycle)	WLAN	8.83	±9.6
10637	AAD	IEEE 802 11ac WIFI (160 MHz, MCS1, 90pc duty cycle)	WLAN	8.79	±9.6
10638	AAD	IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc duty cycle)	WLAN	8.86	±9.6
10639	AAD	IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc duty cycle)	WLAN	8.85	±9.6
10640	AAD	IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc duty cycle)	WLAN	8.98	±9.6
10641	AAD	IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc duty cycle)	WLAN	9.06	±9.6
10642	AAD	IEEE 802.11ao WiFi (160 MHz, MCS6, 90pc duty cycle)	WLAN	9.06	±9.6
10643	AAD	IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc duty cycle)	WLAN	8.89	±9.6
10644	AAD	IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc duty cycle)	WLAN	9.05	±9.6
10645	AAD	IEEE 802.11ac WiFi (160 MHz, MCS9, 90pc duty cycle)	WLAN	9.11	±9.6
10646	AAH	LTE-TDD (SC-FDMA, 1 RB, 5MHz, QPSK, UL Subframe=2,7)	LTEITOD	11.96	±9.6
10647	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2.7)	LTE-TOD	11.96	±9.6
10648	AAA	CDMA2000 (1x Advanced)	CDMA2000	3.45	±9.6
10652	AAF	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TOD	6.91	±9.6
10663	AAF	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TOD	7.42	±9.6
10654	AAE	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	19.8
10655	AAF	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	±9.6
10658	AAB	Pulse Waveform (200Hz, 10%)	Test	10.00	±9.6
10659	AAB	Pulse Waveform (200Hz, 20%)	Test	6.99	±9.5
10660	AAB	Pulse Waveform (200Hz, 40%)	Test	3.98	±9.6
10661	AAB	Pulse Waveform (200Hz, 60%)	Tost	2.22	±9.6
10662	AAB	Pulse Waveform (200Hz, 80%)	Test	0.97	19.6
10670	AAA	Bluetooth Low Energy	Bluetooth	2.19	19.6
10671	AAC	IEEE 802.11ax (20 MHz; MCS0, 90pc duty cycle)	WLAN	9.09	±9.5
10672	AAC	IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle)	WLAN	8.57	±9.5
10673	AAC	IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle)	WLAN	8.78	±9.6
10674	AAC	IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle)	WLAN	8.78	
10675	AAC	IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle)	WLAN		±9.6
10676	AAC	IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle)		8.90	±9.6
10677	AAC	IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle)	WLAN	8.77	±9.6
10678	AAC	IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle)	WLAN	8.73	±9.6
10679	AAC		WLAN	8.78	±9.6
10679	AAC	IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle)	WLAN	8.89	#9.6
		IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle)	WLAN	8.80	±9.6
10681	AAC	IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle)	WLAN	B.62	±9.6
10682	AAC	IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle)	WLAN	8.83	±9.6
10683	AAC	IEEE 802.11ax (20 MHz, MCS0, 99pc duty cycle)	WLAN	8,42	±9.6
10684	AAC	IEEE 802 11ax (20 MHz, MCS1, 99pc duty cycle)	WLAN	8.26	±9.6
10685	AAC	IEEE 802 11ax (20 MHz, MCS2, 99pc duty cycle)	WLAN	8.33	±9.6
10686	AAC	IEEE 802.11ax (20 MHz, MCS3, 99pc duty cycle)	WLAN	8.28	±9.6

Certificate No: EX-7823_Aug23 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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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.



Page: 68 of 72

EX3DV4 - SN:7823 August 11, 2023

	ev Communication System Name	Group	PAR (dB)	UncE k =
	AC IEEE 802.11ax (20 MHz, MCS4, 99pc duty cycle)	WLAN	8.45	±9.6
	AC IEEE 802.11ax (20 MHz, MCS5, 99pc duty cycle)	WLAN	8.29	196
10689 /	AC IEEE 802.11ax (20 MHz, MCS6, 99pc duty cycle)	WLAN	8.65	±9.6
	AC IEEE 802.11ax (20 MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6
0691 A	AC IEEE 802.11ax (20 MHz, MCS8, 99pc duty cycle)	WLAN	8.25	±9.6
0692 4	AC IEEE 802.11ax (20 MHz, MCS9, 99pc duty cycle)	WLAN	8.29	±9.6
0693 /	AC IEEE 802.11ax (20 MHz, MCS10, 99pc duty cycle)	WLAN	8.25	±9:6
0694 /	AC IEEE 802.11ax (20 MHz. MCS11, 99pc duty cycle)		8.57	±9.6
0695 A	AC IEEE 802.11ax (40 MHz, MCS0, 90pc duty cycle)	WLAN	8.78	±9.€
	AC IEEE 802 11ax (40 MHz. MCS1, 90pc duty cycle)	WLAN	8.91	±9.6
	AC IEEE 802.11ax (40 MHz, MCS2, 90pc duty cycle)	WLAN	8.61	±9.8
	AC IEEE 802.11ax (40 MHz, MCS3, 90pc duty cycle)	WLAN	8.89	±9.6
	AC IEEE 802.11ax (40 MHz. MCS4, 90pc duty cycle)	WLAN	8.82	19.6
	AC IEEE 802.11ax (40 MHz, MCS5, 90pc duty cycle)	WLAN	8.73	±9.6
	AC IEEE 802 11ax (40 MHz, MCS6, 90pc duty cycle)	WLAN	8.86	19.6
	AC IEEE 802.11ax (40 MHz, MCS7, 90pc duty cycle)	WLAN		
	AC IEEE 802.11ax (40 MHz, MCS8, 90pc duty cycle)		8.70	19.8
	AC IEEE 802.11ax (40 MHz, MCS9, 90pc duty cycle)	WLAN	8.82	±9.6
		WLAN	8.56	19.6
			8.69	±9.6
	AC IEEE 802.11ax (40 MHz, MCS11, 90pc duty cycle		8.66	±9.8
	AC IEEE 802.11ax (40 MHz, MCS0, 99pc duty cycle)	WLAN	8.32	±9.8
	AC IEEE 802 11ax (40 MHz, MCS1, 99pc duty cycle)	WLAN	8.55	±9.6
	AC IEEE 802.11ax (40 MHz, MCS2, 99pc duty cycle)	WLAN	8.33	±9.6
	AC IEEE 802 11ax (40 MHz, MCS3, 99pc duty cycle)	WLAN	8.29	±9.6
	AC IEEE 802.11ax (40 MHz, MCS4, 99pc duty cycle)	WLAN	8.39	±9.6
	AC IEEE 802 11ax (40 MHz, MCS5, 99pc duty cycle)	WLAN	8.67	±9,6
	AC IEEE 802.11ax (40 MHz, MCS6, 99pc duty cycle)	WLAN	8.33	±9.6
	AC IEEE 802.11ax (40 MHz, MCS7, 99pc duty cycle)	WLAN	8.26	±9.6
0715 /	AC IEEE 802.11ax (40 MHz, MCS8, 99pc duty cycle)	WLAN	8,45	±9.6
0716 /	AC IEEE 802.11ax (40 MHz, MCS9, 99pc duty cycle)	WLAN	8.30	±9.6
0717 /	AC IEEE 802.11ax (40 MHz, MCS10, 99pc duty cycle)	WLAN	8.48	±9.6
0718 /	AC IEEE 802.11ax (40 MHz, MCS11, 99pc duty cycle)		8.24	±9.6
10719	AC IEEE 802.11ax (80 MHz, MCS0, 90pc duty cycle)	WLAN	8.81	±9.6
	AC IEEE 802.11ax (80 MHz, MCS1, 90pc duty cycle)	WLAN	8.87	±9.6
10721	AC IEEE 802.11ax (80 MHz, MCS2, 90pc duty cycle)	WLAN	8.76	±9.6
	AC IEEE 802.11ax (80 MHz, MCS3, 90pc duty cycle)	WLAN	8.55	±9.6
	AC IEEE 802 11ax (80 MHz, MCS4, 90pc duty cycle)	WLAN	8.70	±9.6
	AC IEEE 802.11ax (80 MHz, MCS5, 90pc duty cycle)	WLAN	8.90	±9.6
	AC IEEE 802 11ax (80 MHz, MCS6, 90pc duty cycle)	WLAN	8.74	-
	AC IEEE 802.11ax (80 MHz, MCS7, 90pc duty cycle)	WLAN		±9.€
	AC IEEE 802.11ax (80 MHz, MCS8, 90pc duty cycle)		8.72	±9.6
	(see any sept and along a section of any	WLAN	8.66	±9.6
		WLAN	8.65	±9.6
			8.64	±9.8
	AC IEEE 802.11ax (80 MHz, MCS11, 90pc duty cycle		8.67	±9.6
	AC IEEE 802.11ax (80 MHz, MCS0, 99pc duty cycle)	WLAN	8.42	±9.6
	AC IEEE 802.11ax (80 MHz, MCS1, 99pc duty cycle)	WLAN	8.46	±9.6
	AC IEEE 802.11ax (80 MHz, MCS2, 99pc duty cycle)	WLAN	8.40	±9.6
	AC IEEE 802.11ax (80 MHz, MCS3, 99pc duty cycle)	WLAN	8.25	±9.6
	AC IEEE 802.11ax (80 MHz, MCS4, 99pc duty cycle)	WLAN	8.33	±9.6
	AC IEEE 802.11ax (80 MHz, MCS5, 99pc duty cycle)	WLAN	8.27	±9.8
	AC IEEE 802.11ax (80 MHz, MCS6, 99pc duty cycle)	WLAN	8.36	±9.6
	AC IEEE 802 11ax (80 MHz, MCS7, 99pc duty cycle)	WLAN	8.42	±9.6
0739 /	AC IEEE 802.11ax (80 MHz, MCS8, 99pc duty cycle)	WLAN	8.29	±9.6
10740	AC IEEE 802.11ax (80 MHz, MCS9, 99pc duty cycle)	WLAN	8.48	±9.6
	AC IEEE 802.11ax (80 MHz, MCS10, 99pc duty cycle	WLAN	8.40	±9.6
10742	AC IEEE 802.11ax (80 MHz, MCS11, 99pc duty cycle		8.43	±9.6
0743	AC IEEE 802.11ax (160 MHz, MCS0, 90pc duty cycle		8.94	±9.6
	AC IEEE 802.11ax (160 MHz, MCS1, 90pc duty cycle		9.16	±9.6
	AC IEEE 802.11ax (160 MHz, MCS2, 90pc duty cycle		8.93	19.6
	AC IEEE 802.11ax (160 MHz, MCS3, 90pc duty cycle		9.11	±9.6
	AG IEEE 802.11ax (160 MHz, MCS4, 90pc duty cycle			
	AC IEEE 802.11ax (160 MHz, MCS5, 90pc duty cycle		9.04	19.6
	AC IEEE 802.11ax (160 MHz, MCS6, 90pc duty cycle		8.93	±9.6
	AC IEEE 802.11ax (160 MHz, MCS6, 90pc duty cycle AC IEEE 802.11ax (160 MHz, MCS7, 90pc duty cycle	WLAN	8.90	±9.
			8.79	±9.6
			8.82	±9.8
0752 /	AC IEEE 802.11ax (160 MHz, MCS9, 90pc duty cycle	WLAN	8.81	±9.8

Certificate No: EX-7823 Aug23

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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 responsible to the full extent of the low. prosecuted to the fullest extent of the law.



Page: 69 of 72

EX3DV4 - SN:7823 August 11, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE k =
10753	AAC	IEEE 802.11ax (160 MHz, MCS10, 90pc duty cycle)	WLAN	9.00	±9.6
10754	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	8.94	±9.6
10755	AAC	IEEE 802 11ax (160 MHz, MCSO, 99pc duty cycle)	WLAN	8.64	±9.6
0756	AAC	IEEE 802.11ax (160 MHz, MCS1, 99pc duty cycle)	WLAN	8.77	±9.6
0757	AAC	IEEE 802.11ax (160 MHz, MCS2, 99pc duty cycle)	WLAN	8.77	±9.6
0758	AAC	IEEE 802.11ax (160 MHz, MCS3, 99pc duty cycle)	WLAN	8.69	±9.6
0759	AAC	IEEE 802.11ax (160 MHz, MCS4, 99pc duty cycle)	WLAN	8.58	±9.6
0.760	AAC	IEEE 802.11ax (160 MHz, MCS5, 99pc duty cycle)	WLAN	8.49	±9.6
0761	AAC	IEEE 802.11ax (160 MHz, MCS6, 99pc duty cycle)	WLAN	8.58	±9.6
0762	AAC	IEEE 802.11ax (160 MHz; MCS7, 99pc duty cycle)	WLAN	8 49	19.6
0763	AAC	IEEE 802.11ax (160 MHz, MCS8, 99pc duty cycle).	WLAN	8.53	19.5
0764	AAC	IEEE 802 11ax (160 MHz, MCS9, 99pc duty cycle)	WLAN	8.54	±9.6
0765	AAC	IEEE 802 11ax (160 MHz, MCS10, 99pc duty cycle)	WLAN	8.54	±9.6
0766	AAC	IEEE 802.1Tax (160 MHz, MCS11, 99pc duty cycle)	WLAN	8.51	+9.6
0767	AAE	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15kHz)	5G NR FR1 TOD	7.99	±9.6
0.768	AAD	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FRI TOD	8.01	
0769	AAD	5G NR (CP-OFDM, 1 RB, 15MHz, QPSK, 15kHz)			±9.6
0770	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	±9.6
0771	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±9.6
			5G NR FR1 TDD	8.02	±9.6
0772	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TOD	8.23	£9.6
0773	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.03	±9.6
0774	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±9.6
0775	AAD	5G NR (CP-OFDM, 50% RB, 5MHz, QPSK, 15kHz)	5G NR FR1 TDD	8.31	±9.6
0776	AAD	5G NR (CP-OFDM, 50% RB, 10MHz, QPSK, 15kHz)	5G NR FR1 TDD	8.30	±9.6
0777	AAC	5G NR (GP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	±9.6
0778	AAD	SG NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.34	±9.6
0779	AAC	5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.42	±9.6
0780	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	±9.6
0781	AAD	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TOD	8.38	±9.6
0782	AAD	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	±9.6
0783	AAE	5G NR (CP-OFDM, 100% RB, 5MHz, QPSK, 15kHz)	5G NR FR1 TDD	8.31	±9.6
0784	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.29	±9.6
0.785	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FRI TDD	8.40	±9.6
0786	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FRI TDD	8.35	±9.6
10787	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.44	±9.6
0788	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15kHz)	5G NR FR1 TDD	8.39	
0789	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15kHz)			±9.6
0790	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15kHz)	5G NR FR1 TDD	5.37	19.6
0791	AAE	5G NR (CP-OFDM, 100% RB, 50MRz, QPSK, 15KRz)	5G NR FR1 TDD	8.39	±9.6
0792	AAD		5G NR FR1 TDD	7.83	±9.6
		5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.92	±9.8
0793	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.95	±9.6
0794	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QFSK, 30 kHz)	SG NR FR1 TDD	7.82	±9.6
0795	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.84	±9.6
0796	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	±9.6
0797	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.01	19.6
0.798	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7,89	±9.6
0799	AAD	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±9.6
0801	AAD	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	±9.6
0802	AAD	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.87	±9.6
0803	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±9.6
0805	AAD	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FRI TDD	8.34	±9.6
0806	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.37	±9.6
0809	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	19.6
0810	AAD	5G NR (CP OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FRI TDD	8.34	±9.6
0812	AAD	5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	19.6
0817	AAE	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	19.6
0818	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD		
0819	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)		8.34	±9.6
0820	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.33	±9.6
0821	AAD		5G NR FR1 TDD	8.30	±9 €
		5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.6
0822	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TOD	8.41	19.6
10823	AAD	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
0825	AAD	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.0
0B27	AAD	5G NR (CP-QFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.42	±9.6
10828	AAD	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.43	±9.6

Certificate No: EX-7823_Aug23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



Page: 70 of 72

EX3DV4 - SN:7823 August 11, 2023

din	Rev	Communication System Name	Group	PAR (dB)	UncE k =
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 TD0	7.63	±9.6
0831	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7,73	±9.6
10832	AAD	5G NR (GP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.74	±9.6
0833	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	±9.6
0834	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.75	±9.6
4000	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7,70	19.6
0836	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7,66	±9.6
0839	AAD	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.68	±9.6
0840	AAD	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	±9.6
0841	AAD	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz) 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.67	±9.6
0843	AAD	5G NR (CP-OFDM, 1 HB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7,71	19.6
0844	AAD	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.49	±9.6
0846	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	19.6
0854	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
0855	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)	5G NR FRI TOD	8.34	±9.6
0856	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)	- TP-75-31-211-18-81	8.36	±9.6
0857	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	±9.6
0858	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)	SG NR FR1 TDD	B.35	±9.6
0859	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)		R.36	±9.6
0860	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
0861	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)	SG NR FR1 TOD	8.40	
0863	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
0864	AAD	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	±9.6
0865	AAD	5G NR (CP-OFDM, 100% RB. 100 MHz; QPSK, 60 kHz)	5G NR FR1 TDD	8.41	
0866	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0868	AAD	5G NR (DFT:s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.89	19.6
0869	AAE	5G NR (DFT s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	±9.6
0870	AAE	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.86	±9.6
0871	AAE	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.75	+9.6
0872	AAE	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.52	+9.6
0873	AAE	5G NR (DFT:s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	±9.6
0874	AAE	5G NR (DFT's-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	±9.6
0875	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	±9.6
0876	AAE	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.39	±9.6
0877	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	7.95	±9.6
0878	AAE	5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.41	±9.6
0879	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.12	±9.6
0880	AAE	5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.38	+9.6
0881	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	±9.6
0882	AAE	5G.NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.96	±9.6
0883	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.57	±9.6
0884	AAE	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.53	±9.6
0885	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD:	6.61	±9.6
0888	AAE	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	±9.6
0887	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	SG NR FR2 TDD	7.78	±9.6
0888	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.35	±9.6
0889	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.02	±9.6
0890	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.40	±9.5
0891	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz).	5G NR FR2 TOD	8.13	±9.6
0892	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.41	±9.6
0897	AAC	5G NR (DFT-s-OFDM, 1 RB, 5MHz, QPSK, 30kHz)	5G NR FR1 TDD	5.66	±9.6
0898	AAB	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	±9.6
0899	AAB	5G NR (DFT/s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	±9.6
0900	AAB	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.88	±9.6
0901	AAB	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0902	AAB	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9,6
0903	AAB	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0904	AAB	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0905	AAB	5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.68	±9.6
0906	AAB	5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
0907	AAC	5G NR (DFTs-OFDM, 50% RB, 5MHz, QPSK, 30kHz)	5G NR FR1 TDD	5.78	±9.6
0908	AAB	5G NR (DFT/s-OFDM, 50% RB, 10 MHz, QPSK, 30kHz)	5G NR FR1 TDD	5.93	±9.6
0909	AAB	5G NR (DFTs-OFDM, 50% RB, 15 MHz, QPSK, 30kHz)	5G NR FR1 TDD	5.96	±9.6
0910	AAB	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	±9.6

Certificate No: EX-7823_Aug23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



Page: 71 of 72

EX3DV4 - SN:7823 August 11, 2023

			Unc ^E k =
SG NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	±9.6
5G NR (DFT-a-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	SG NR FR1 TDD	5.84	19.6
5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	19.6
5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.85	±9.6
5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	±9.6
5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	±9.6
5G NR (DFT/s-QFDM, 50% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94	±9.8
5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86	±9.6
5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86	±9.6
5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	19.6
5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
5G NR (DFTs-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.82	±9.6
5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.95	±9.6
5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94	±9.6
5G NR (DFT-s-OFDM, 1 RB, 5 MHz, OPSK, 15 kHz)	5G NR FR1 FDD	5.52	±9.6
5G NR (DFT:s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	±9.6
5G NR (DFT-a-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	SG NR FR1 FDD	5.52	49.6
5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	49.6
5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	+9.6
5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15kHz)	5G NR FR1 FDD	5.51	+9.6
5G NR (DFT/s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	100,000
5G NR (DFT-s-OFDM, 50% RB, 5MHz, QPSK, 15kHz)			±9.6
5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	±9.6
	5G NR FR1 FDD	5.77	±9.6
5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	±9.6
5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.82	±9.6
5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.89	±9.6
5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	±9.6
5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	±9.6
5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.95	19.6
5G NR (DFT:s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.81	±9.6
5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	±9.6
5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	±9.6
5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	±9.6
5G NR (DFT:s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FRI FDD	5.94	±9.6
5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	±9.6
5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	±9.6
5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.92	±9.6
5G NR DL (CP-OFDM, TM 3.1, 5MHz, 64-QAM, 15kHz)	5G NR FR1 FDD	8.25	±9.6
5G NR DL (CP-OFDM, TM 3:1, 10 MHz, 64-QAM, 15 kHz)	SG NR FR1 FDD	8.15	±9.6
5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.23	±9.6
5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.42	±9.6
5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 84-QAM, 30 kHz)	5G NR FR1 FDD	8.14	
5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FRI FDD	8.31	±9.6
5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64 QAM, 30 kHz)	5G NR FR1 FDD		
5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.61	±9.6
5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)			±9.6
5G NR DL (CP-OFDM, 1M 3.1, 5 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.32	±9.6
	5G NR FR1 TDD	9.36	±9.6
5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.40	±9.6
5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9,55	±9,6
5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	SG NR FR1 TDD	9.29	±9.6
5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.37	±9.6
5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.55	±9.6
5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.42	±9.6
5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.49	±9.6
5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	SG NR FR1 TDD	11.59	19.6
5G NR (DFT-6-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	9.06	±9.6
5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz)	5G NR FRI TDD	10.28	±9.6
ULLA BDR	ULLA	1.16	±9.6
ULLA HDR4	ULLA	8.58	±9.6
ULLA HDRE			±9.6
ULLA HDRp4			±9.6
ULLA HDRp8			±9.6
UL	LA BDR LA HDR4 LA HDR8 LA HDR94	LA BDR ULLA LA HDR4 ULLA LA HDRE ULLA LA HDR94 ULLA	LA BDR ULLA 1,16 LA HDR4 ULLA 8,58 LA HDR6 ULLA 10,32 LA HDR94 ULLA 3,19

Certificate No: EX-7823_Aug23

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.

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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



Page: 72 of 72

EX3DV4 - SN:7823 August 11, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	UncE 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	19.6
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	49.6
10990	AAA	5G NR DL (CP-OFDM, TM 3.1, 90 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.52	±9.6
11003	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15kHz)	5G NR FR1 TDD	10.24	±9.6
11004	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	10.73	19.6
11005	AAA	5G NR DL (CP-OFDM, TM 3.1, 25MHz, 64-QAM, 15kHz)	5G NR FR1 FDD	5.70	±9.6
11006	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.55	±9.6
11007	AAA	5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.46	±9.6
11008	.AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.51	±9.6
11009	AAA	5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 84-QAM, 30 kHz)	5G NR FR1 FDD	8.76	±9.6
11010	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.95	±9.6
11011	AAA	5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.96	+9.6
11012	AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.68	+9.6
11013	AAA	IEEE 802.11be (320 MHz, MCS1, 99pc duty cycle)	WLAN	8.47	±9.6
11014	AAA	IEEE 802.11be (320 MHz, MCS2, 99pc duty cycle)	WLAN	8.45	±9.6
11015	AAA	IEEE 802.11be (320 MHz, MCS3, 99pc duty-cycle)	WLAN	8.44	±9.6
11016	AAA	IEEE 802.11be (320 MHz, MCS4, 99pc duty cycle)	WLAN	8.44	±9.6
11017	AAA	IEEE 802.11be (320 MHz, MCS5, 99pc duty cycle)	WLAN	8.41	±9.6
11018	AAA	IEEE 802.11be (320 MHz, MCS6, 99pc duty cycle)	WLAN	8.40	=9.6
11019	AAA	IEEE 802.11be (320 MHz, MCS7, 99pc duty cycle)	WLAN	8,29	±9.6
11020	AAA	IEEE 802.11be (320 MHz, MCS8, 99pc duty cycle)	WLAN	8.27	±9.6
11021	AAA	IEEE 802.11be (320 MHz, MCS9, 99pc duty cycle)	WLAN	8,46	+9.6
11022	AAA	IEEE 802.11be (320 MHz, MCS10, 99pc duty cycle)	WLAN	8.36	±9.6
11023	AAA	IEEE 802,11be (320 MHz, MCS11, 99pc duty cycle)	WLAN	8.09	19.6
11024	AAA	IEEE 802.11be (320 MHz, MCS12, 99pc duty cycle)	WLAN	8.42	19.6
11025	AAA	IEEE 802.11be (320 MHz, MCS13, 99pc duty cycle)	WLAN	8.37	±9.6
11026	AAA	IEEE 802 11be (320 MHz, MCS0, 99pc duty cycle)	WLAN	8.39	±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-7823 Aug23

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 http://www.sgs.com.tw/Terms-and-Conditions and for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com.tw/Terms-and-Conditions. 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