

Page: 31 of 36

Measurement Conditions

DAS

DASY Version	DASY8 Module mmWave	V3.2
Phantom	5G Phantom	
Distance Horn Aperture - plane	10 mm	
Number of measured planes	2 (10mm, 10mm + \(\mathcal{N} \)4)	
Frequency	10 GHz ± 10 MHz	

Calibration Parameters, 10 GHz

Circular Averaging

Distance Horn	Prad1	Max E-field	Uncertainty	Avg Power Density		Uncertainty
Aperture to	(mW)	(V/m)	(k = 2)	Avg (psPDn+, psF	Dtot+, psPDmod+)	(k = 2)
Measured Plane				(W/m ²)		
				1 cm ²	4 cm ²	
10 mm	93.3	152	1.27 dB	60.3	56.2	1.28 dB

Distance Horn Aperture to Measured Plane	Prad¹ (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Power Density psPDn+, psPDtot+, psPDmod+ (W/m²)		Uncertainty (k = 2)
				1 cm ²	4 cm ²	
10 mm	93.3	152	1.27 dB	60.1, 60.3, 60.5	55.9, 56.2, 56.4	1.28 dB

Square Averaging

Distance Horn Aperture to Measured Plane	Prad¹ (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Avg Powe Avg (psPDn+, psI (W.		Uncertainty (k = 2)
				1 cm ²	4 cm ²	
10 mm	93.3	152	1.27 dB	60.3	56.1	1.28 dB

Distance Horn Aperture to Measured Plane	Prad¹ (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Power Density psPDn+, psPDtot+, psPDmod+ (W/m²)		Uncertainty (k = 2)
			1 cm ²	4 cm ²		
10 mm	93.3	152	1.27 dB	60.1, 60.3, 60.4	55.8, 56.1, 56.3	1.28 dB

Max Power Density

Distance Horn Aperture to Measured Plane	Prad¹ (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Max Power Density Sn, Stot, Stot (W/m²)	Uncertainty (k = 2)
10 mm	93.3	152	1.27 dB	61.8, 61.8, 62.0	1.28 dB

Certificate No: 5G-Veri10-1070_Aug24 Page 3 of 8

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.

SGS Taiwan Ltd.

¹ Assessed ohmic and mismatch loss plus numerical offset: 0.30 dB



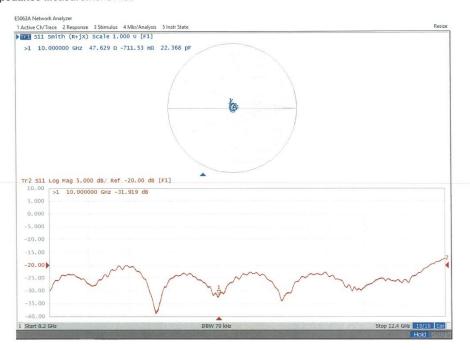
Page: 32 of 36

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters

Impedance, transformed to feed point	47.6 Ω - 0.7 jΩ	
Return Loss	- 31.9 dB	

Impedance Measurement Plot



Certificate No: 5G-Veri10-1070_Aug24

Page 4 of 8

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 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.

SGS Taiwan Ltd.



Page: 33 of 36

DASY Report

Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Properties

Name, Manufacturer	Dimensions [mm]	IMEI	DUT Type
5G Verification Source 10 GHz	100.0 x 100.0 x 172.0	SN: 1070	

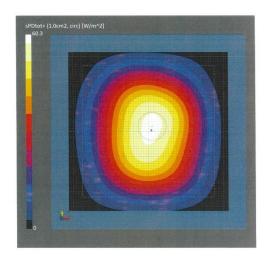
Phantom Section	Position, Test Distance [mm]	Band	Group,	Frequency [MHz], Channel Number	Conversion Factor
5G -	10.0 mm	Validation band	CW	10000.0,	1.0
				10000	

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave Phantom - 1002	Air	EUmmWV3 - SN9374_F1-55GHz,	DAE4ip Sn1602,
		2023-12-04	2023-11-08

Scan Setup Measurement Results

•	5G Scan		5G Scan
Sensor Surface [mm]	10.0	Date	2024-08-16, 09:41
MAIA	MAIA not used	Avg. Area [cm ²]	1.00
		Avg. Type	Circular Averaging
		psPDn+ [W/m ²]	60.1
		psPDtot+ [W/m ²]	60.3
		psPDmod+ [W/m²]	60.5
		Max(Sn) [W/m ²]	61.8
		Max(Stot) [W/m ²]	61.8
		Max(Stot) [W/m ²]	62.0
		E _{max} [V/m]	152
		Power Drift [dR]	-0.02



Certificate No: 5G-Veri10-1070_Aug24

Page 5 of 8

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.

SGS Taiwan Ltd.



Page: 34 of 36

DASY Report

Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Properties

Name, Manufacturer	Dimensions [mm]	IMEI	DUT Type
5G Verification Source 10 GHz	100.0 x 100.0 x 172.0	SN: 1070	

Exposure Conditions

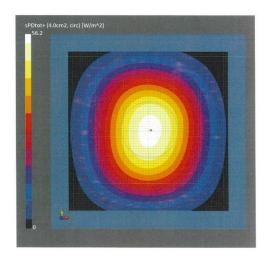
Phantom Section	Position, Test Distance [mm]	Band	Group,	Frequency [MHz], Channel Number	Conversion Factor
5G -	10.0 mm	Validation band	CW	10000.0,	1.0

Sensor Surface [mm]

hantom	Medium	Probe, Calibration Date	DAE, Calibration Date
nmWave Phantom - 1002	Air	EUmmWV3 - SN9374_F1-55GHz,	DAE4ip Sn1602,
		2023-12-04	2023-11-08

Scan Setup Measurement Results 5G Scar

5G Scan		5G Scan
10.0	Date	2024-08-16, 09:41
MAIA not used	Avg. Area [cm ²]	4.00
	Avg. Type	Circular Averaging
	psPDn+ [W/m ²]	55.9
	psPDtot+ [W/m²]	56.2
	psPDmod+ [W/m ²]	56.4
	Max(Sn) [W/m ²]	61.8
	Max(Stot) [W/m ²]	61.8
	Max(Stot) [W/m ²]	62.0
	E _{max} [V/m]	152
	Power Drift [dB]	-0.02



Certificate No: 5G-Veri10-1070_Aug24

Page 6 of 8

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.

SGS Taiwan Ltd.



Page: 35 of 36

DASY Report

Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Properties

Name, Manufacturer	Dimensions [mm]	IMEI	DUT Type
5G Verification Source 10 GHz	100.0 x 100.0 x 172.0	SN: 1070	5

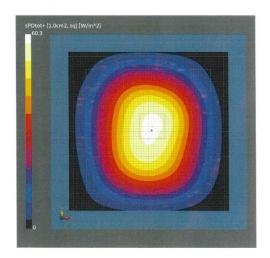
aura Canditions

Phantom Section	Position, Test Distance [mm]	Band	Group,	Frequency [MHz], Channel Number	Conversion Factor
5G -	10.0 mm	Validation band	CW	10000.0, 10000	1.0

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave Phantom - 1002	Air	EUmmWV3 - SN9374_F1-55GHz,	DAE4ip Sn1602,
		2023-12-04	2023-11-08

Scan Setup		Measurement Results	
	5G Scan		5G Scan
Sensor Surface [mm]	10.0	Date	2024-08-16, 09:41
MAIA	MAIA not used	Avg. Area [cm ²]	1.00
		Avg. Type	Square Averaging
		psPDn+ [W/m ²]	60.1
		psPDtot+ [W/m ²]	60.3
		psPDmod+ [W/m ²]	60.4
		Max(Sn) [W/m ²]	61.8
		Max(Stot) [W/m ²]	61.8
		Max(Stot) [W/m ²]	62.0
		E _{max} [V/m]	152
		Power Drift [dB]	-0.02



Certificate No: 5G-Veri10-1070_Aug24

Page 7 of 8

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.

所非另有說明・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 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.

SGS Taiwan Ltd.



-0.02

Page: 36 of 36

DASY Report

Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Properties

DUT Type Dimensions [mm] IME 5G Verification Source 10 GHz 100.0 x 100.0 x 172.0 SN: 1070

Exposure Conditions

Position, Test Distance Band Group, Frequency [MHz], Conversion Factor **Phantom Section** [mm] **Channel Number** 10000.0. 1.0 10.0 mm Validation band CW

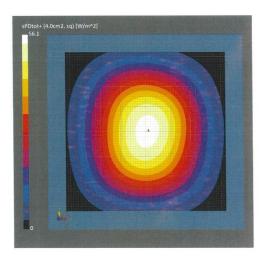
Hardware Setup

DAE, Calibration Date Probe, Calibration Date Medium EUmmWV3 - SN9374_F1-55GHz, 2023-12-04 DAE4ip Sn1602, 2023-11-08 mmWave Phantom - 1002

Scan Setup

5G Scan 5G Scan 2024-08-16, 09:41 Sensor Surface [mm] Avg. Area [cm²] Avg. Type psPDn+ [W/m²] MAIA not used 4.00 Square Averaging 55.8 psPDtot+ [W/m²] psPDmod+ [W/m²] 56.1 Max(Sn) [W/m²] Max(Stot) [W/m²] 61.8 62.0 Max(|Stot|) [W/m2] E_{max} [V/m] Power Drift [dB] 152

Measurement Results



Certificate No: 5G-Veri10-1070 Aug24

Page 8 of 8

- 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.

SGS Taiwan Ltd.