Measurement Conditions

DASY system configuration, as far as not given on page 1.

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

Calibration Parameters, 10 GHz

Circular Averaging

Distance Horn Aperture to Measured Plane	*Prad*[1] *(mW)*	**Max E-field (V/m)**	Uncertainty (k = 2)	Avg Power Density Avg (psPDn+, psPDtot+, psPDmod+) (W/m²)		Uncertainty (k = 2)
				1 cm²	**4** cm²	
10 mm	93.3	**152**	1.27 dB	**60.3**	**56.2**	1.28 dB

Distance Horn Aperture to Measured Plane	*Prad*[1] *(mW)*	**Max E-field (V/m)**	Uncertainty (k = 2)	Power Density psPDn+, psPDtot+, psPDmod+ (W/m²)		Uncertainty (k = 2)
				1 cm²	**4** cm²	
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	*Prad*[1] *(mW)*	**Max E-field (V/m)**	Uncertainty (k = 2)	Avg Power Density Avg (psPDn+, psPDtot+, psPDmod+) (W/m²)		Uncertainty (k = 2)
				1 cm²	**4** cm²	
10 mm	93.3	**152**	1.27 dB	**60.3**	**56.1**	1.28 dB

Distance Horn Aperture to Measured Plane	*Prad*[1] *(mW)*	**Max E-field (V/m)**	Uncertainty (k = 2)	Power Density psPDn+, psPDtot+, psPDmod+ (W/m²)		Uncertainty (k = 2)
				1 cm²	**4** cm²	
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	*Prad*[1] *(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

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

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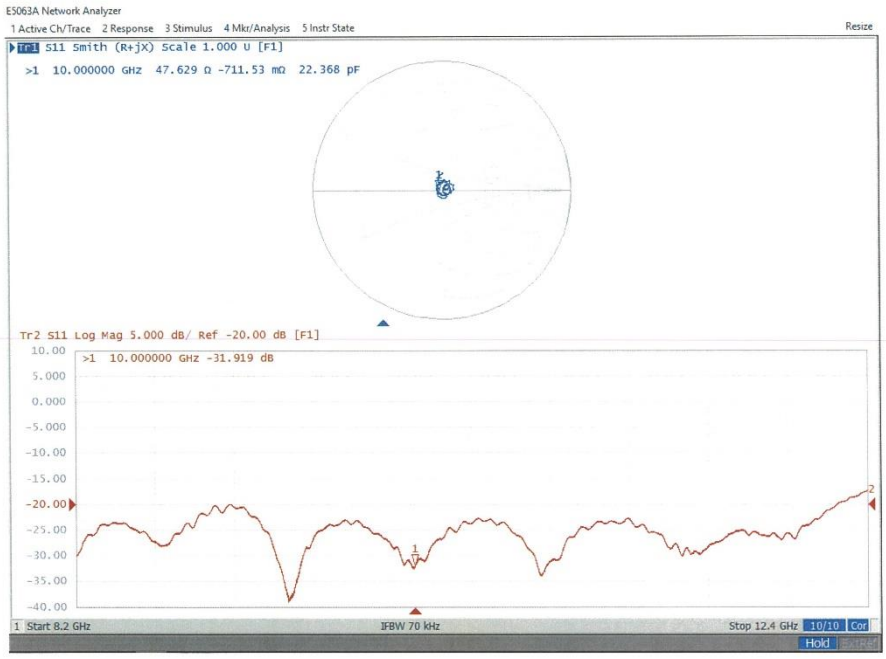
Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters

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

Impedance Measurement Plot



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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, 10000	1.0

Hardware Setup

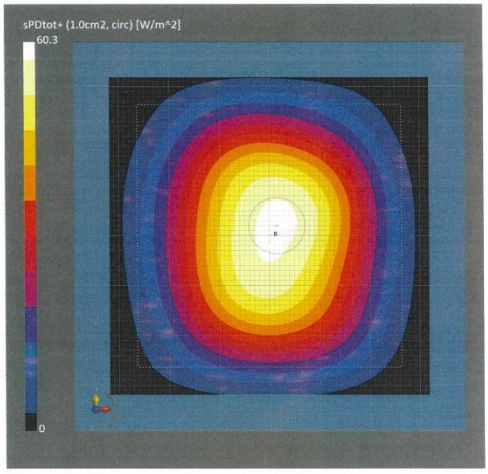
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave Phantom - 1002	Air	EUmmWV3 - SN9374_F1-55GHz, 2023-12-04	DAE4ip Sn1602, 2023-11-08

Scan Setup

	5G Scan
Sensor Surface [mm]	10.0
MAIA	MAIA not used

Measurement Results

	5G Scan
Date	2024-08-16, 09:41
Avg. Area [cm²]	1.00
Avg. Type	Circular Averaging
psPDn+ [W/m²]	60.1
psPDtot+ [W/m²]	60.3
psPDmod+ [W/m²]	60.5
Max(Sn) [W/m²]	61.8
Max(Stot) [W/m²]	61.8
Max(|Stot|) [W/m²]	62.0
E_{max} [V/m]	152
Power Drift [dB]	-0.02



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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, 10000	1.0

Hardware Setup

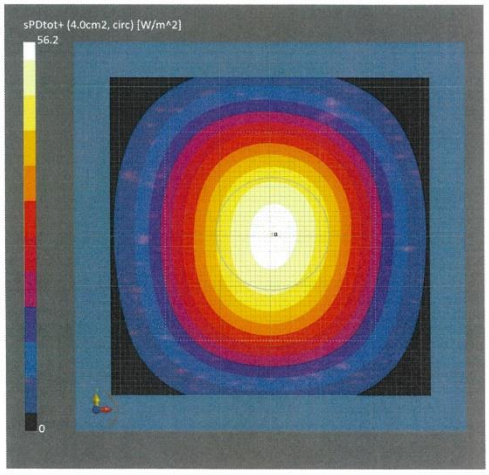
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave Phantom - 1002	Air	EUmmWV3 - SN9374_F1-55GHz, 2023-12-04	DAE4ip Sn1602, 2023-11-08

Scan Setup

	5G Scan
Sensor Surface [mm]	10.0
MAIA	MAIA not used

Measurement Results

	5G Scan
Date	2024-08-16, 09:41
Avg. Area [cm²]	4.00
Avg. Type	Circular Averaging
psPDn+ [W/m²]	55.9
psPDtot+ [W/m²]	56.2
psPDmod+ [W/m²]	56.4
Max(Sn) [W/m²]	61.8
Max(Stot) [W/m²]	61.8
Max(|Stot|) [W/m²]	62.0
E_{max} [V/m]	152
Power Drift [dB]	-0.02



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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, 10000	1.0

Hardware Setup

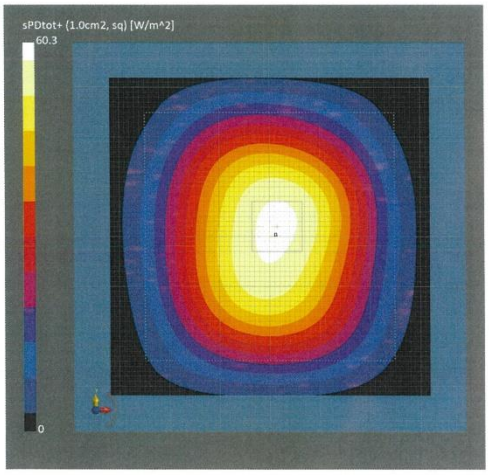
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave Phantom - 1002	Air	EUmmWV3 - SN9374_F1-55GHz, 2023-12-04	DAE4ip Sn1602, 2023-11-08

Scan Setup

	5G Scan
Sensor Surface [mm]	10.0
MAIA	MAIA not used

Measurement Results

	5G Scan
Date	2024-08-16, 09:41
Avg. Area [cm²]	1.00
Avg. Type	Square Averaging
psPDn+ [W/m²]	60.1
psPDtot+ [W/m²]	60.3
psPDmod+ [W/m²]	60.4
Max(Sn) [W/m²]	61.8
Max(Stot) [W/m²]	61.8
Max(|Stot|) [W/m²]	62.0
E_{max} [V/m]	152
Power Drift [dB]	-0.02



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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, 10000	1.0

Hardware Setup

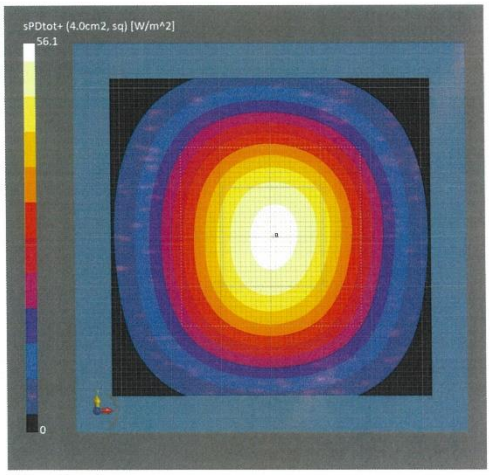
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave Phantom - 1002	Air	EUmmWV3 - SN9374_F1-55GHz, 2023-12-04	DAE4ip Sn1602, 2023-11-08

Scan Setup

	5G Scan
Sensor Surface [mm]	10.0
MAIA	MAIA not used

Measurement Results

	5G Scan
Date	2024-08-16, 09:41
Avg. Area [cm²]	4.00
Avg. Type	Square Averaging
psPDn+ [W/m²]	55.8
psPDtot+ [W/m²]	56.1
psPDmod+ [W/m²]	56.3
Max(Sn) [W/m²]	61.8
Max(Stot) [W/m²]	61.8
Max(|Stot|) [W/m²]	62.0
E_{max} [V/m]	152
Power Drift [dB]	-0.02



- End of report -

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