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Accreditation No.: **SCS 0108**

Client **UL USA**

Certificate No: **5G-Veri10-1040\_Jan23**

## CALIBRATION CERTIFICATE

Object **5G Verification Source 10 GHz - SN: 1040**

Calibration procedure(s) **QA CAL-45.v4  
Calibration procedure for sources in air above 6 GHz**

Calibration date: **January 19, 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
Reference Probe EUmmWV3	SN: 9374	2023-01-03(No. EUmmWV3-9374_Jan23)	Jan-24
DAE4ip	SN: 1602	2022-06-27 (No. DAE4ip-1602_Jun22)	Jun-23
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator R&S SMF100A	SN: 100184	19-May-22 (in house check Nov-22)	In house check: Nov-23
Power sensor R&S NRP18S-10	SN: 101258	31-May-22 (in house check Nov-22)	In house check: Nov-23

Calibrated by:	Name <b>Leif Klysner</b>	Function <b>Laboratory Technician</b>	Signature 
Approved by:	Name <b>Sven Kühn</b>	Technical Manager	

Issued: February 7, 2023

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Accreditation No.: **SCS 0108**

## Glossary

CW Continuous wave

## Calibration is Performed According to the Following Standards

- Internal procedure QA CAL-45, Calibration procedure for sources in air above 6 GHz.
- IEC/IEEE 63195-1, "Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz)", May 2022

## Methods Applied and Interpretation of Parameters

- *Coordinate System:* z-axis in the waveguide horn boresight, x-axis is in the direction of the E-field, y-axis normal to the others in the field scanning plane parallel to the horn flare and horn flange.
- *Measurement Conditions:* (1) 10 GHz: The radiated power is the forward power to the horn antenna minus ohmic and mismatch loss. The forward power is measured prior and after the measurement with a power sensor. During the measurements, the horn is directly connected to the cable and the antenna ohmic and mismatch losses are determined by far-field measurements. (2) 30, 45, 60 and 90 GHz: The verification sources are switched on for at least 30 minutes. Absorbers are used around the probe cub and at the ceiling to minimize reflections.
- *Horn Positioning:* The waveguide horn is mounted vertically on the flange of the waveguide source to allow vertical positioning of the EUmmW probe during the scan. The plane is parallel to the phantom surface. Probe distance is verified using mechanical gauges positioned on the flare of the horn.
- *E- field distribution:* E field is measured in two x-y-plane (10mm, 10mm +  $\lambda/4$ ) with a vectorial E-field probe. The E-field value stated as calibration value represents the E-field-maxima and the averaged (1cm<sup>2</sup> and 4cm<sup>2</sup>) power density values at 10mm in front of the horn.
- *Field polarization:* Above the open horn, linear polarization of the field is expected. This is verified graphically in the field representation.

## Calibrated Quantity

- Local peak E-field (V/m) and average of peak spatial components of the poynting vector (W/m<sup>2</sup>) averaged over the surface area of 1 cm<sup>2</sup> and 4cm<sup>2</sup> at the nominal operational frequency of the verification source. Both square and circular averaging results are listed.

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%.

## Measurement Conditions

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

<b>DASY Version</b>	DASY8 Module mmWave	V3.2
<b>Phantom</b>	5G Phantom	
<b>Distance Horn Aperture - plane</b>	10 mm	
<b>XY Scan Resolution</b>	dx, dy = 7.5 mm	
<b>Number of measured planes</b>	2 (10mm, 10mm + $\lambda/4$ )	
<b>Frequency</b>	10 GHz $\pm$ 10 MHz	

## Calibration Parameters, 10 GHz

### Circular Averaging

Distance Horn Aperture to Measured Plane	<i>Prad</i> <sup>1</sup> (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Avg Power Density (W/m <sup>2</sup> )		Uncertainty (k = 2)
				Avg (psPDn+, psPDtot+, psPDmod+)		
				1 cm <sup>2</sup>	4 cm <sup>2</sup>	
10 mm	86.1	163	1.27 dB	64.7	59.0	1.28 dB

Distance Horn Aperture to Measured Plane	<i>Prad</i> <sup>1</sup> (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Power Density (W/m <sup>2</sup> )		Uncertainty (k = 2)
				psPDn+, psPDtot+, psPDmod+		
				1 cm <sup>2</sup>	4 cm <sup>2</sup>	
10 mm	86.1	163	1.27 dB	61.3, 65.9, 66.8	55.4, 60.4, 61.2	1.28 dB

### Square Averaging

Distance Horn Aperture to Measured Plane	<i>Prad</i> <sup>1</sup> (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Avg Power Density (W/m <sup>2</sup> )		Uncertainty (k = 2)
				Avg (psPDn+, psPDtot+, psPDmod+)		
				1 cm <sup>2</sup>	4 cm <sup>2</sup>	
10 mm	86.1	163	1.27 dB	64.7	58.9	1.28 dB

Distance Horn Aperture to Measured Plane	<i>Prad</i> <sup>1</sup> (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Power Density (W/m <sup>2</sup> )		Uncertainty (k = 2)
				psPDn+, psPDtot+, psPDmod+		
				1 cm <sup>2</sup>	4 cm <sup>2</sup>	
10 mm	86.1	163	1.27 dB	61.3, 65.9, 66.8	55.3, 60.3, 61.1	1.28 dB

### Max Power Density

Distance Horn Aperture to Measured Plane	<i>Prad</i> <sup>1</sup> (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Max Power Density (W/m <sup>2</sup> )		Uncertainty (k = 2)
				Sn, Stot,  Stot		
10 mm	86.1	163	1.27 dB	63.5, 67.8, 68.8		1.28 dB

<sup>1</sup> Assessed ohmic and mismatch loss plus numerical offset: 0.55 dB

# 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: 1040	-

### 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

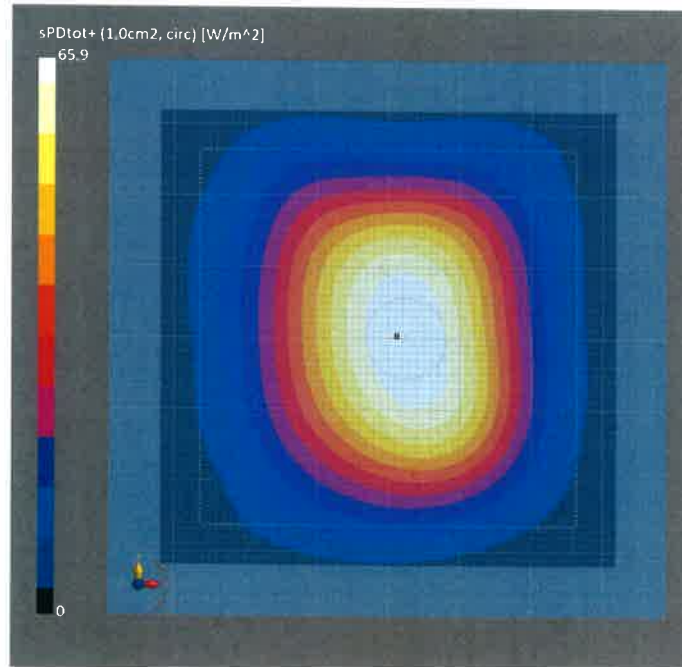
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave Phantom - 1002	Air	EUmmWV3 - SN9374_F1-55GHz, 2023-01-03	DAE4ip Sn1602, 2022-06-27

### Scan Setup

	5G Scan
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.0
MAIA	MAIA not used

### Measurement Results

	5G Scan
Date	2023-01-19, 10:59
Avg. Area [cm <sup>2</sup> ]	1.00
Avg. Type	Circular Averaging
psPDn+ [W/m <sup>2</sup> ]	61.3
psPDtot+ [W/m <sup>2</sup> ]	65.9
psPDmod+ [W/m <sup>2</sup> ]	66.8
Max(Sn) [W/m <sup>2</sup> ]	63.5
Max(Stot) [W/m <sup>2</sup> ]	67.8
Max( Stot ) [W/m <sup>2</sup> ]	68.8
E <sub>max</sub> [V/m]	163
Power Drift [dB]	-0.00



# 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: 1040	

### 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, 2023-01-03	DAE4ip Sn1602, 2022-06-27

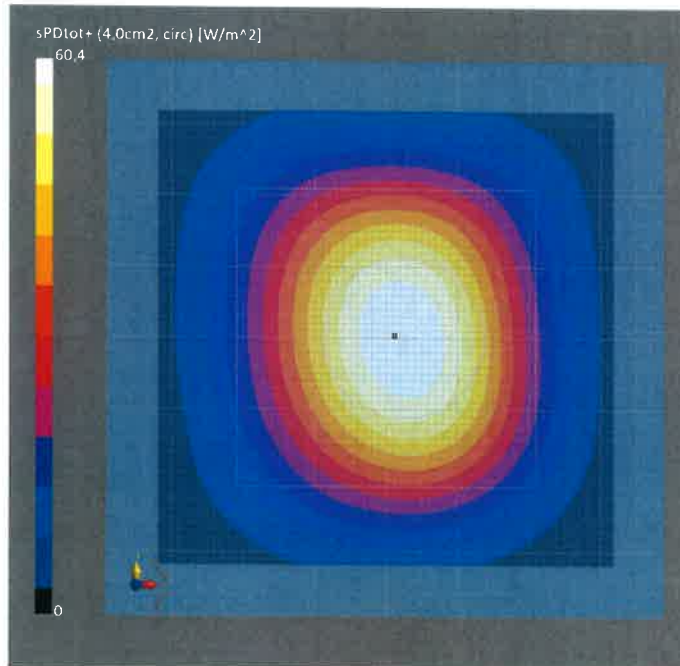
### Scan Setup

**Grid Extents [mm]**  
**Grid Steps [lambda]**  
**Sensor Surface [mm]**  
**MAIA**

**5G Scan**  
 120.0 x 120.0  
 0.25 x 0.25  
 10.0  
 MAIA not used

### Measurement Results

	5G Scan
Date	2023-01-19, 10:59
Avg. Area [cm <sup>2</sup> ]	4.00
Avg. Type	Circular Averaging
psPDn+ [W/m <sup>2</sup> ]	55.4
psPDtot+ [W/m <sup>2</sup> ]	60.4
psPDmod+ [W/m <sup>2</sup> ]	61.2
Max(Sn) [W/m <sup>2</sup> ]	63.5
Max(Stot) [W/m <sup>2</sup> ]	67.8
Max( Stot ) [W/m <sup>2</sup> ]	68.8
E <sub>max</sub> [V/m]	163
Power Drift [dB]	-0.00



# 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: 1040	=

### 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

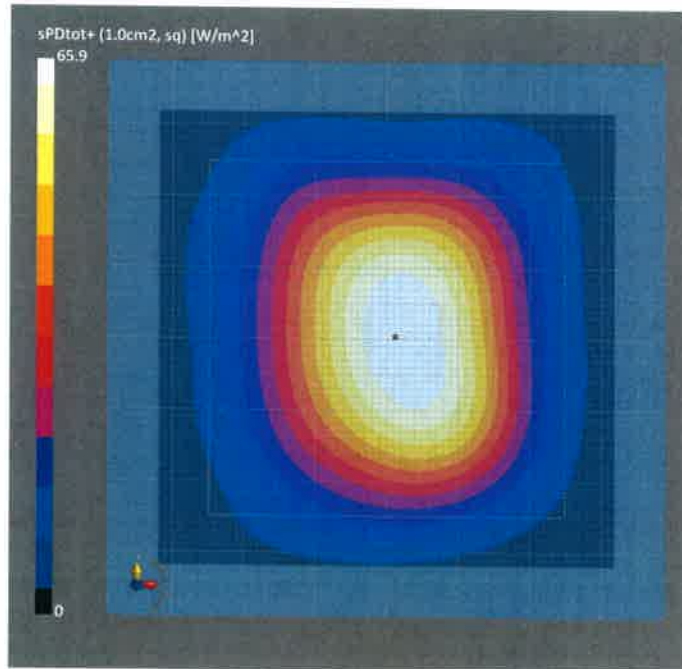
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave Phantom - 1002	Air	EUmmWV3 - SN9374_F1-55GHz, 2023-01-03	DAE4ip Sn1602, 2022-06-27

### Scan Setup

	5G Scan
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.0
MAIA	MAIA not used

### Measurement Results

	5G Scan
Date	2023-01-19, 10:59
Avg. Area [cm <sup>2</sup> ]	1.00
Avg. Type	Square Averaging
psPDn+ [W/m <sup>2</sup> ]	61.3
psPDtot+ [W/m <sup>2</sup> ]	65.9
psPDmod+ [W/m <sup>2</sup> ]	66.8
Max(Sn) [W/m <sup>2</sup> ]	63.5
Max(Stot) [W/m <sup>2</sup> ]	67.8
Max( Stot ) [W/m <sup>2</sup> ]	68.8
E <sub>max</sub> [V/m]	163
Power Drift [dB]	-0.00



# 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: 1040	

### 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

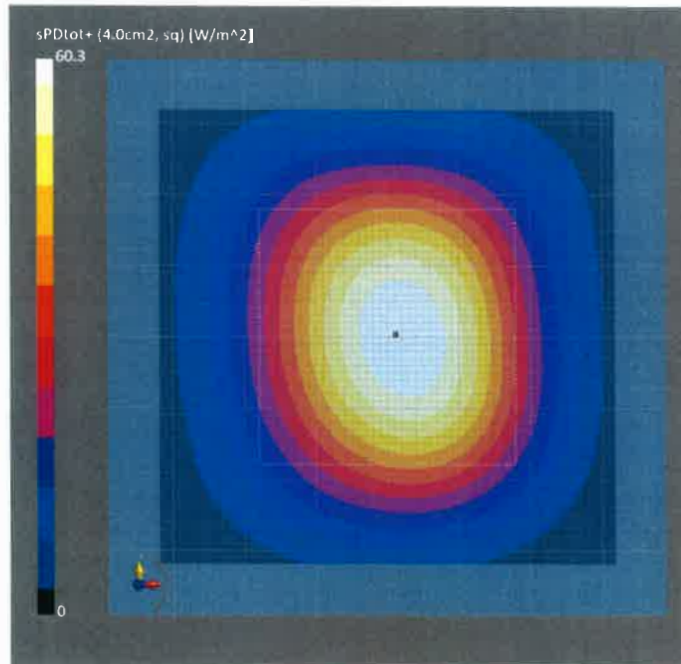
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave Phantom - 1002	Air	EUmmWV3 - SN9374_F1-55GHz, 2023-01-03	DAE4ip Sn1602, 2022-06-27

### Scan Setup

	5G Scan
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.0
MAIA	MAIA not used

### Measurement Results

	5G Scan
Date	2023-01-19, 10:59
Avg. Area [cm <sup>2</sup> ]	4.00
Avg. Type	Square Averaging
psPDn+ [W/m <sup>2</sup> ]	55.3
psPDtot+ [W/m <sup>2</sup> ]	60.3
psPDmod+ [W/m <sup>2</sup> ]	61.1
Max(Sn) [W/m <sup>2</sup> ]	63.5
Max(Stot) [W/m <sup>2</sup> ]	67.8
Max( Stot ) [W/m <sup>2</sup> ]	68.8
E <sub>max</sub> [V/m]	163
Power Drift [dB]	-0.00



mmWave Rotated Square Validation\_Probe SN 9617 SAR 1A

SAR Lab	Test Date	5G Probe SN	Probe Cal. Due Date	DAE SN	DAE Cal. Due Date	Frequency (GHz)	5G Verification Source SN	Source Cal. Due Date	Averaging Type	Input Power Source Cal. (dBm)	Input Power System Cart (dBm)	Measured psPDn (W/m <sup>2</sup> ) over 4cm <sup>2</sup>	Target psPDn (W/m <sup>2</sup> ) over 4cm <sup>2</sup>	Deviation (dB)	Delta	Measured psPDrot (W/m <sup>2</sup> ) over 4cm <sup>2</sup>	Target psPDrot (W/m <sup>2</sup> ) over 4cm <sup>2</sup>	Deviation (dB)	Delta	Measured psPDmod (W/m <sup>2</sup> ) over 4cm <sup>2</sup>	Target psPDmod (W/m <sup>2</sup> ) over 4cm <sup>2</sup>	Deviation (dB)	Delta
1A	2/22/2024	9617	1/15/2025	1715	2/12/2025	10	1040	9/5/2024	Square	20.0	20.00	54.7	55.6	-0.07	-2%	54.9	55.6	-0.06	-1%	55.1	55.6	-0.04	-1%
1A	2/22/2024	9617	1/15/2025	1715	2/12/2025	10	1040	9/5/2024	Square	20.0	20.00	56.4	55.6	0.06	1%	56.7	55.6	0.09	2%	57.0	55.6	0.11	3%
1A	2/22/2024	9617	1/15/2025	1715	2/12/2025	10	1040	9/5/2024	Square	20.0	20.00	55.1	55.6	-0.04	-1%	56.3	55.6	0.05	1%	56.6	55.6	0.08	2%
1A	2/22/2024	9617	1/15/2025	1715	2/12/2025	10	1040	9/5/2024	Square	20.0	20.00	55.9	55.6	0.02	1%	56.8	55.6	0.09	2%	57.4	55.6	0.14	3%
1A	2/22/2024	9617	1/15/2025	1715	2/12/2025	10	1040	9/5/2024	Square	20.0	20.00	55.3	55.6	-0.02	-1%	55.6	55.6	0.00	0%	55.9	55.6	0.02	1%
1A	2/22/2024	9617	1/15/2025	1715	2/12/2025	10	1040	9/5/2024	Square	20.0	20.00	55.2	55.6	-0.03	-1%	55.5	55.6	-0.01	0%	55.8	55.6	0.02	0%
1A	2/22/2024	9617	1/15/2025	1715	2/12/2025	10	1040	9/5/2024	Square	20.0	20.00	54.9	55.6	-0.06	-1%	55.5	55.6	-0.01	0%	55.9	55.6	0.02	1%
1A	2/22/2024	9617	1/15/2025	1715	2/12/2025	10	1040	9/5/2024	Square	20.0	20.00	55.2	55.6	-0.03	-1%	55.8	55.6	0.02	0%	56.1	55.6	0.04	1%
1A	2/22/2024	9617	1/15/2025	1715	2/12/2025	10	1040	9/5/2024	Square	20.0	20.00	56.8	55.6	0.09	2%	57.8	55.6	0.17	4%	58.1	55.6	0.19	4%
1A	2/22/2024	9617	1/15/2025	1715	2/12/2025	10	1040	9/5/2024	Square	20.0	20.00	55.5	55.6	-0.01	0%	56.9	55.6	0.10	2%	57.3	55.6	0.13	3%
<b>Average</b>												<b>55.5</b>	55.6	-0.01	0%	<b>56.2</b>	55.6	0.05	1%	<b>56.5</b>	55.6	0.07	2%

psPD Avg (W/m<sup>2</sup>) over 4cm<sup>2</sup> 56.1





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Accreditation No.: **SCS 0108**

Client **UL**  
**Research Triangle Park, USA**

Certificate No. **5G-Veri10-1040\_Feb24**

## CALIBRATION CERTIFICATE

Object **5G Verification Source 10 GHz - SN: 1040**

Calibration procedure(s) **QA CAL-45.v5  
Calibration procedure for sources in air above 6 GHz**

Calibration date: **February 13, 2024**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
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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
Reference Probe EUmmWV3	SN: 9374	04-Dec-23 (No. EUmm-9374_Dec23)	Dec-24
DAE4ip	SN: 1602	08-Nov-23 (No. DAE4ip-1602_Nov23)	Nov-24

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator R&S SMF100A	SN: 100184	29-Nov-23 (in house check Nov-23)	In house check: Nov-24
Power sensor R&S NRP18S-10	SN: 101258	29-Nov-23 (in house check Nov-23)	In house check: Nov-24
Network Analyzer Keysight E5063A	SN: MY54504221	31-Oct-19 (in house check Oct-22)	In house check: Oct-25

Calibrated by:	Name <b>Leif Klysner</b>	Function Laboratory Technician	Signature 
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Approved by:	Name <b>Sven Kühn</b>	Technical Manager	
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Issued: February 14, 2024

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## Glossary

CW                      Continuous wave

## Calibration is Performed According to the Following Standards

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- IEC/IEEE 63195-1, "Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz)", May 2022

## Methods Applied and Interpretation of Parameters

- *Coordinate System:* z-axis in the waveguide horn boresight, x-axis is in the direction of the E-field, y-axis normal to the others in the field scanning plane parallel to the horn flare and horn flange.
- *Measurement Conditions:* (1) 10 GHz: The radiated power is the forward power to the horn antenna minus ohmic and mismatch loss. The forward power is measured prior and after the measurement with a power sensor. During the measurements, the horn is directly connected to the cable and the antenna ohmic and mismatch losses are determined by far-field measurements. (2) 30, 45, 60 and 90 GHz: The verification sources are switched on for at least 30 minutes. Absorbers are used around the probe cub and at the ceiling to minimize reflections.
- *Horn Positioning:* The waveguide horn is mounted vertically on the flange of the waveguide source to allow vertical positioning of the EUmmW probe during the scan. The plane is parallel to the phantom surface. Probe distance is verified using mechanical gauges positioned on the flare of the horn.
- *E- field distribution:* E field is measured in two x-y-plane (10mm, 10mm +  $\lambda/4$ ) with a vectorial E-field probe. The E-field value stated as calibration value represents the E-field-maxima and the averaged (1cm<sup>2</sup> and 4cm<sup>2</sup>) power density values at 10mm in front of the horn.
- *Field polarization:* Above the open horn, linear polarization of the field is expected. This is verified graphically in the field representation.

## Calibrated Quantity

- Local peak E-field (V/m) and average of peak spatial components of the poynting vector (W/m<sup>2</sup>) averaged over the surface area of 1 cm<sup>2</sup> and 4cm<sup>2</sup> at the nominal operational frequency of the verification source. Both square and circular averaging results are listed.

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%.

## Measurement Conditions

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

<b>DASY Version</b>	DASY8 Module mmWave	V3.2
<b>Phantom</b>	5G Phantom	
<b>Distance Horn Aperture - plane</b>	10 mm	
<b>Number of measured planes</b>	2 (10mm, 10mm + $\lambda/4$ )	
<b>Frequency</b>	10 GHz $\pm$ 10 MHz	

## Calibration Parameters, 10 GHz

### Circular Averaging

Distance Horn Aperture to Measured Plane	<i>Prad</i> <sup>1</sup> (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Avg Power Density Avg (psPDn+, psPDtot+, psPDmod+) (W/m <sup>2</sup> )		Uncertainty (k = 2)
				1 cm <sup>2</sup>	4 cm <sup>2</sup>	
10 mm	93.3	<b>153</b>	1.27 dB	<b>59.7</b>	<b>55.7</b>	1.28 dB

Distance Horn Aperture to Measured Plane	<i>Prad</i> <sup>1</sup> (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Power Density psPDn+, psPDtot+, psPDmod+ (W/m <sup>2</sup> )		Uncertainty (k = 2)
				1 cm <sup>2</sup>	4 cm <sup>2</sup>	
10 mm	93.3	<b>153</b>	1.27 dB	<b>59.1, 59.8, 60.1</b>	<b>55.1, 55.8, 56.1</b>	1.28 dB

### Square Averaging

Distance Horn Aperture to Measured Plane	<i>Prad</i> <sup>1</sup> (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Avg Power Density Avg (psPDn+, psPDtot+, psPDmod+) (W/m <sup>2</sup> )		Uncertainty (k = 2)
				1 cm <sup>2</sup>	4 cm <sup>2</sup>	
10 mm	93.3	<b>153</b>	1.27 dB	<b>59.7</b>	<b>55.6</b>	1.28 dB

Distance Horn Aperture to Measured Plane	<i>Prad</i> <sup>1</sup> (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Power Density psPDn+, psPDtot+, psPDmod+ (W/m <sup>2</sup> )		Uncertainty (k = 2)
				1 cm <sup>2</sup>	4 cm <sup>2</sup>	
10 mm	93.3	<b>153</b>	1.27 dB	<b>59.1, 59.8, 60.1</b>	<b>55.0, 55.7, 56.0</b>	1.28 dB

### Max Power Density

Distance Horn Aperture to Measured Plane	<i>Prad</i> <sup>1</sup> (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Max Power Density Sn, Stot,  Stot  (W/m <sup>2</sup> )	Uncertainty (k = 2)
10 mm	93.3	<b>153</b>	1.27 dB	<b>60.5, 61.3, 61.6</b>	1.28 dB

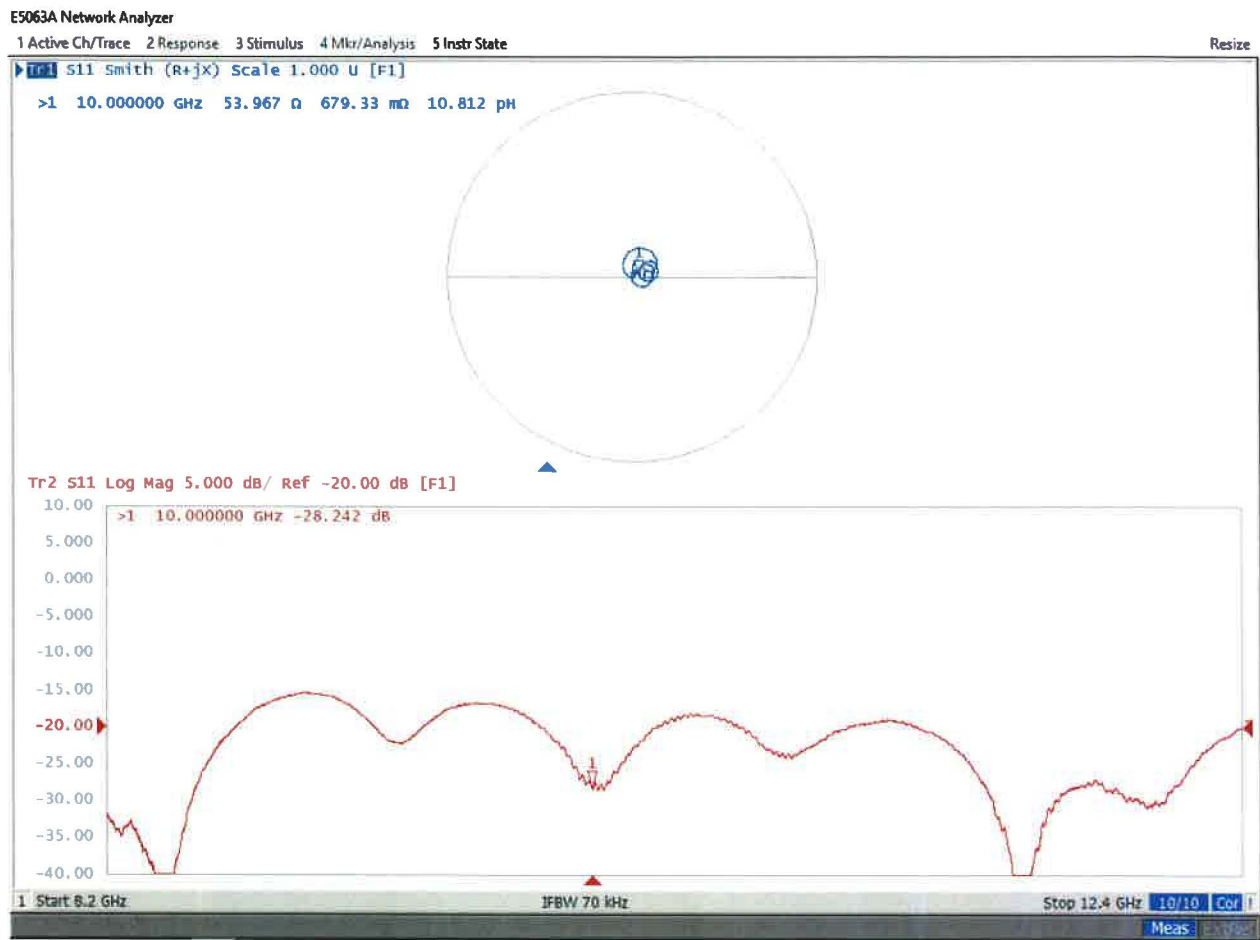
<sup>1</sup> Assessed ohmic and mismatch loss plus numerical offset: 0.30 dB

## Appendix (Additional assessments outside the scope of SCS 0108)

### Antenna Parameters

Impedance, transformed to feed point	54.0 $\Omega$ + 0.7 j $\Omega$
Return Loss	- 28.2 dB

### Impedance Measurement Plot



# 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: 1040	-

### 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

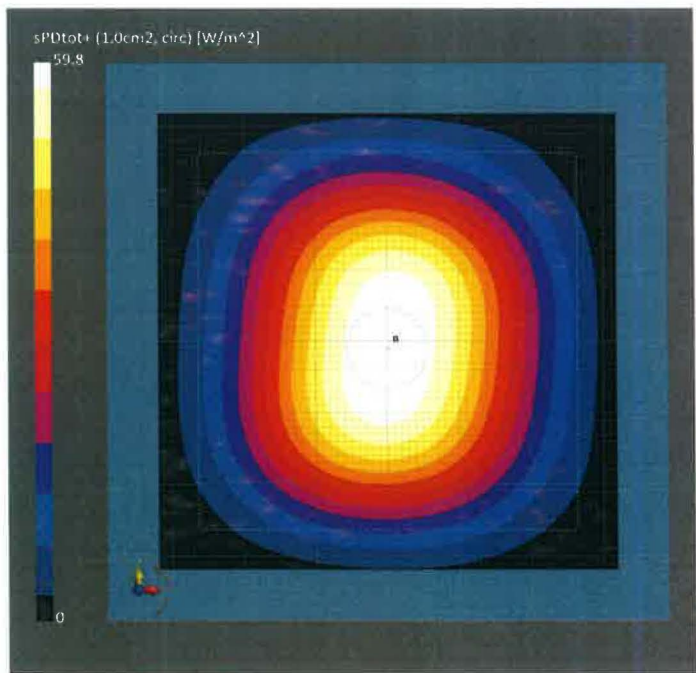
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave Phantom - 1002	Air	EUmmWV3 - SN9374_F1-55GHz, 2023-12-04	DAE4ip Sn1602, 2023-11-08

### Scan Setup

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

### Measurement Results

Measurement Results	5G Scan
Date	2024-02-13, 07:15
Avg. Area [cm <sup>2</sup> ]	1.00
Avg. Type	Circular Averaging
psPDn+ [W/m <sup>2</sup> ]	59.1
psPDtot+ [W/m <sup>2</sup> ]	59.8
psPDmod+ [W/m <sup>2</sup> ]	60.1
Max(Sn) [W/m <sup>2</sup> ]	60.5
Max(Stot) [W/m <sup>2</sup> ]	61.3
Max( Stot ) [W/m <sup>2</sup> ]	61.6
E <sub>max</sub> [V/m]	153
Power Drift [dB]	0.04



# 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: 1040	-

### 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

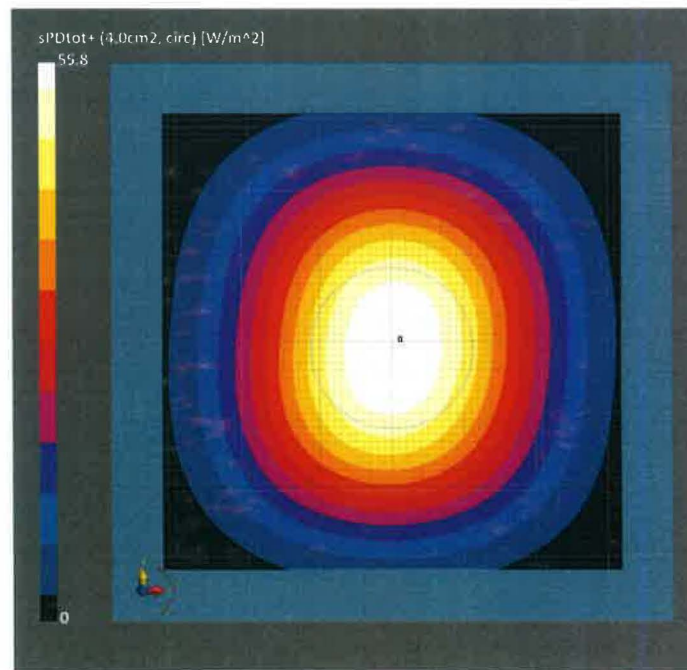
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave Phantom - 1002	Air	EUmmWV3 - SN9374_F1-55GHz, 2023-12-04	DAE4ip Sn1602, 2023-11-08

### Scan Setup

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

### Measurement Results

Date	5G Scan
Avg. Area [cm <sup>2</sup> ]	2024-02-13, 07:15 4.00
Avg. Type	Circular Averaging
psPDn+ [W/m <sup>2</sup> ]	55.1
psPDtot+ [W/m <sup>2</sup> ]	55.8
psPDmod+ [W/m <sup>2</sup> ]	56.1
Max(Sn) [W/m <sup>2</sup> ]	60.5
Max(Stot) [W/m <sup>2</sup> ]	61.3
Max( Stot ) [W/m <sup>2</sup> ]	61.6
E <sub>max</sub> [V/m]	153
Power Drift [dB]	0.04



# 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: 1040	-

### 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

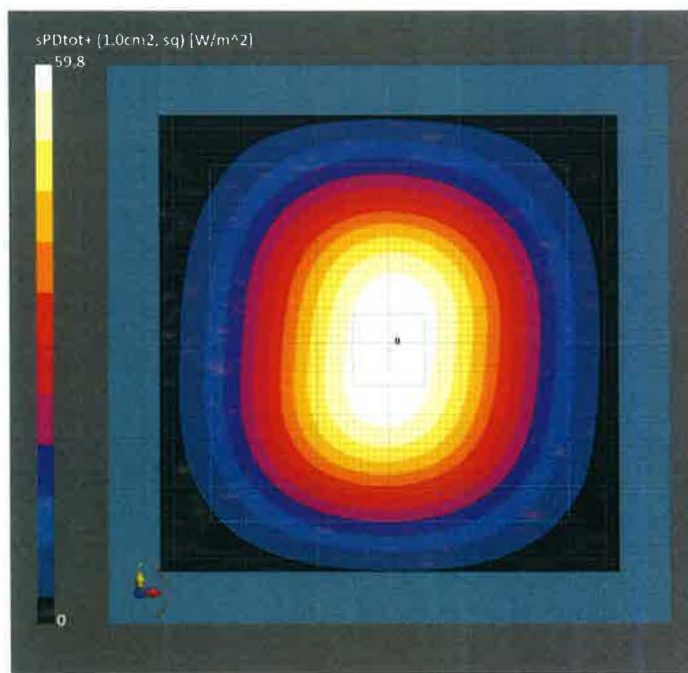
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave Phantom - 1002	Air	EUmmWV3 - SN9374_F1-55GHz, 2023-12-04	DAE4ip Sn1602, 2023-11-08

### Scan Setup

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

### Measurement Results

Date	5G Scan
2024-02-13, 07:15	
Avg. Area [cm <sup>2</sup> ]	1.00
Avg. Type	Square Averaging
psPDn+ [W/m <sup>2</sup> ]	59.1
psPDtot+ [W/m <sup>2</sup> ]	59.8
psPDmod+ [W/m <sup>2</sup> ]	60.1
Max(Sn) [W/m <sup>2</sup> ]	60.5
Max(Stot) [W/m <sup>2</sup> ]	61.3
Max( Stot ) [W/m <sup>2</sup> ]	61.6
E <sub>max</sub> [V/m]	153
Power Drift [dB]	0.04



# 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: 1040	-

### 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

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

### Measurement Results

Date	5G Scan
2024-02-13, 07:15	
Avg. Area [cm <sup>2</sup> ]	4.00
Avg. Type	Square Averaging
psPDn+ [W/m <sup>2</sup> ]	55.0
psPDtot+ [W/m <sup>2</sup> ]	55.7
psPDmod+ [W/m <sup>2</sup> ]	56.0
Max(Sn) [W/m <sup>2</sup> ]	60.5
Max(Stot) [W/m <sup>2</sup> ]	61.3
Max( Stot ) [W/m <sup>2</sup> ]	61.6
E <sub>max</sub> [V/m]	153
Power Drift [dB]	0.04

