

APPENDIX D (PROBE CALIBRATION DATA)



FCC ID: US7-A100 Date of Issue: Report No.: HCT-IA0810-1501 Nov.11, 2008

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





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Accreditation No.: SCS 108

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CALIBRATION	CERTIFICAT			
Object	ER3DV6 - SN:2	343		
Calibration procedure(s)	QA CAL-02:v5 Calibration procedure for E-field probes optimized for close near field evaluations in air			
Calibration date:	May 19, 2008			
Condition of the calibrated item	In Tolerance			
The measurements and the unco	ertainties with confidence	tional standards, which realize the physical uni probability are given on the following pages an ory facility: environment temperature $(22 \pm 3)^{\circ}$ C	d are part of the certificate.	
Calibration Equipment used (M&	TE critical for calibration)			
100	- FE	Cal Date (Certificate No.)	Scheduled Calibration	
Primary Standards	TE critical for calibration) ID # GB41293874	Cal Date (Certificate No.) 1-Apr-06 (No. 217-00788)	Scheduled Calibration Apr-09	
Primary Standards Power meter E44198	ID#	Cal Date (Certificate No.) 1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00788)	10000000	
Primary Standards Power meter E4419B Power sensor E4412A	ID# GB41293874	1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00788)	Apr-09	
Primary Standards Power mater E4419B Power sensor E4412A Power sensor E4412A	ID # GB41293874 MY41495277	1-Apr-06 (No. 217-00788) 1-Apr-06 (No. 217-00788) 1-Apr-06 (No. 217-00788)	Apr-09 Apr-09	
Primary Standards Power mater E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator	ID # GB41293874 MY41495277 MY41496087	1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00788)	Apr-09 Apr-09 Apr-09	
Calibration Equipment used (M& Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator	ID # GB41293874 MY41496277 MY41496087 SN: S5054 (3c)	1-Apr-06 (No. 217-00788) 1-Apr-06 (No. 217-00788) 1-Apr-06 (No. 217-00786) 8-Aug-07 (No. 217-00719)	Apr-09 Apr-09 Apr-09 Aug-08	
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator	ID # GB41293874 MY41495277 MY41498087 SN: S5054 (3c) SN: S5066 (20b)	1-Apr-06 (No. 217-00788) 1-Apr-06 (No. 217-00786) 1-Apr-06 (No. 217-00786) 8-Aug-07 (No. 217-00719) 31-Mar-08 (No. 217-00787) 8-Aug-07 (No. 217-00720)	Apr-09 Apr-09 Apr-09 Aug-08 Apr-09	
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ER3DV6	ID # GB41293874 MY41495277 MY41496087 SN: S5054 (3c) SN: S5066 (20b) SN: S5129 (30b)	1-Apr-06 (No. 217-00788) 1-Apr-06 (No. 217-00788) 1-Apr-06 (No. 217-00786) 8-Aug-07 (No. 217-00719) 31-Mar-08 (No. 217-00787)	Apr-09 Apr-09 Apr-09 Aug-08 Apr-09 Aug-08	
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator	ID # GB41293874 MY41496277 MY41496087 SN: S5054 (3c) SN: S5066 (20b) SN: S5129 (30b) SN: 2328	1-Apr-06 (No. 217-00788) 1-Apr-06 (No. 217-00786) 1-Apr-06 (No. 217-00786) 8-Aug-07 (No. 217-00787) 8-Aug-07 (No. 217-00787) 8-Aug-07 (No. 217-00720) 2-Oct-07 (No. ER3-2328_Oct07)	Apr-09 Apr-09 Apr-09 Aug-08 Apr-09 Aug-08 Oct-08	
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ER3DV6 DAE4	ID # GB41293874 MY41496277 MY41498087 SN: S5054 (3c) SN: S5086 (20b) SN: S5129 (30b) SN: 2328 SN: 654	1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00788) 8-Aug-07 (No. 217-00787) 31-Mer-08 (No. 217-00787) 8-Aug-07 (No. 217-00720) 2-Oct-07 (No. ER3-2328_Oct07) 24-Apr-08 (No. DAE4-654_Apr08)	Apr-09 Apr-09 Apr-09 Aug-08 Apr-09 Aug-08 Oct-08 Apr-09	
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ER3DV6 DAE4 Secondary Standards	ID # GB41293874 MY41496277 MY41496087 SN: 55054 (3c) SN: S5066 (20b) SN: S5129 (30b) SN: 2328 SN: 654	1-Apr-06 (No. 217-00788) 1-Apr-06 (No. 217-00786) 1-Apr-06 (No. 217-00786) 8-Aug-07 (No. 217-00719) 31-Mer-08 (No. 217-00787) 8-Aug-07 (No. 217-00720) 2-Oct-07 (No. ER3-2328_Oct07) 24-Apr-08 (No. DAE4-654_Apr08) Check Date (in house)	Apr-09 Apr-09 Apr-09 Aug-08 Apr-09 Aug-08 Oct-08 Apr-09 Scheduled Check	
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 30 dB Attenuator Reference Probe ER3DV6 DAE4 Secondary Standards RF generator HP 8648C Network Analyzer HP 8753E	ID # GB41293874 MY41496277 MY41496087 SN: S5054 (3c) SN: S5086 (20b) SN: S5129 (30b) SN: 2328 SN: 654 ID # US3842U01700 US37390585	1-Apr-06 (No. 217-00788) 1-Apr-06 (No. 217-00786) 1-Apr-06 (No. 217-00786) 8-Aug-07 (No. 217-00787) 8-Aug-07 (No. 217-00787) 8-Aug-07 (No. 217-00787) 2-Oct-07 (No. ER3-2328_Oct07) 24-Apr-06 (No. DAE4-854_Apr08) Check Date (in house) 4-Aug-98 (in house check Oct-07) 18-Oct-01 (in house check Oct-07)	Apr-09 Apr-09 Apr-09 Aug-08 Apr-09 Aug-08 Oct-08 Apr-09 Scheduled Check In house check: Oct-09	
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe ER3DV6 DAE4 Secondary Standards RF generator HP 8648C	ID # GB41293874 MY41495277 MY41496277 MY41496087 SN: S5064 (3c) SN: S5066 (20b) SN: S5129 (30b) SN: 2328 SN: 654 ID # US3642U01700 US37390685	1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00789) 31-Mar-08 (No. 217-00787) 8-Aug-07 (No. 217-00787) 2-Oct-07 (No. ER3-2328_Oct07) 24-Apr-08 (No. DAE4-884_Apr08) Check Date (in house) 4-Aug-99 (in house check Oct-07) 18-Oct-01 (in house check Oct-07)	Apr-09 Apr-09 Apr-09 Aug-08 Apr-09 Aug-08 Oct-08 Apr-09 Scheduled Check In house check: Oct-09 In house check: Oct-09	

Certificate No: ER3-2343_May08

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HCT-IA0810-1501 FCC ID: US7-A100 **Date of Issue:** Nov.11, 2008

> Calibration Laboratory of Schmid & Partner

Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





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Accreditation No.: SCS 108

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Glossary:

NORMx,y,z sensitivity in free space diode compression point DCP Polarization o o rotation around probe axis

Polarization 9 9 rotation around an axis that is in the plane normal to probe axis (at

measurement center), i.e., 9 = 0 is normal to probe axis

Connector Angle information used in DASY system to align probe sensor X to the robot

coordinate system

Calibration is Performed According to the Following Standards:

a) 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,z: Assessed for E-field polarization 9 = 0 for XY sensors and 9 = 90 for Z sensor (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide).
- NORM(f)x,y,z = NORMx,y,z * frequency response (see Frequency Response Chart).
- DCPx,v.z: DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency.
- Spherical isotropy (3D deviation from isotropy): in a locally homogeneous field realized using an open waveguide setup.
- 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).

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ER3DV6 SN:2343

May 19, 2008

Probe ER3DV6

SN:2343

Manufactured: January 1, 2005 Last calibrated: June 25, 2007 Recalibrated: May 19, 2008

Calibrated for DASY Systems

(Note: non-compatible with DASY2 system!)

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ER3DV6 SN:2343

May 19, 2008

DASY - Parameters of Probe: ER3DV6 SN:2343

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Sensitivity	in Free	Space	$[\mu V/(V/m)^2]$

Diode Compression^A

NormX	1.65 ± 10.1 % (k=2)	DCP X	95 mV
NormY	1.59 ± 10.1 % (k=2)	DCP Y	95 mV
NormZ	1.63 ± 10.1 % (k=2)	DCP Z	96 mV

Frequency Correction

X	0.0
Υ	0.0
Z	0.0

Sensor Offset (Probe Tip to Sensor Center)

X 2.5 mm Y 2.5 mm Z 2.5 mm

Connector Angle 68 °

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%.

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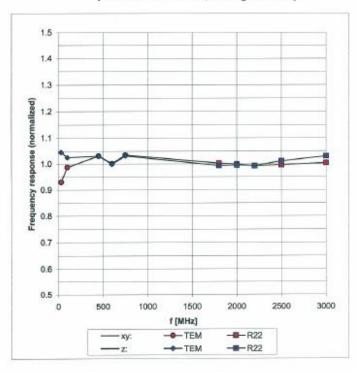
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A numerical linearization parameter: uncertainty not required

ER3DV6 SN:2343 May 19, 2008

Frequency Response of E-Field

(TEM-Cell:ifi110 EXX, Waveguide R22)

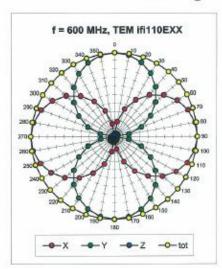


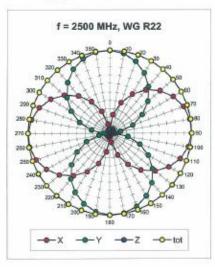
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

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ER3DV6 SN:2343

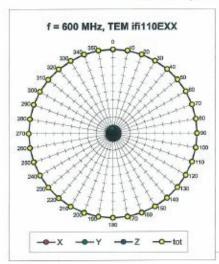
Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

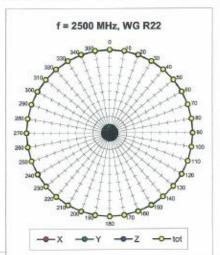




May 19, 2008

Receiving Pattern (6), 9 = 90°



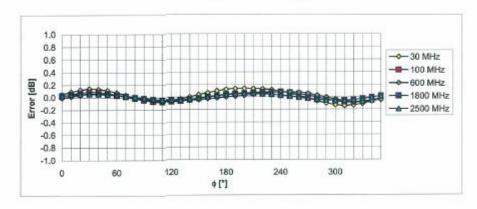


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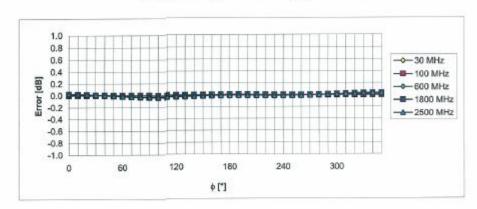
ER3DV6 SN:2343 May 19, 2008

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



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

Receiving Pattern (\$\phi\$), 9 = 90°



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

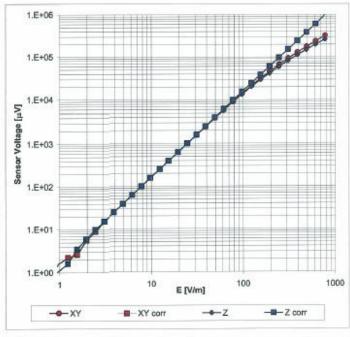
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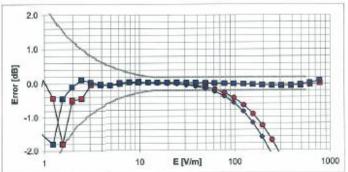
ER3DV6 SN:2343

Dynamic Range f(E-field)

May 19, 2008

(Waveguide R22, f = 1800 MHz)





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

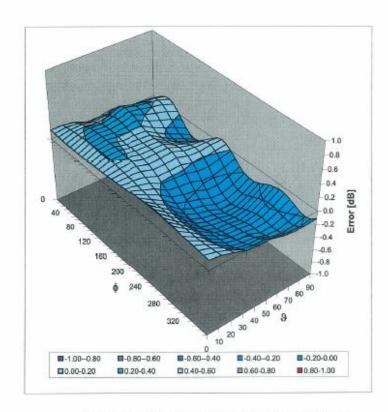
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ER3DV6 SN:2343

May 19, 2008

Deviation from Isotropy in Air Error (ϕ, ϑ) , f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

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Accreditation No.: SCS 108

Client HCT (Dymstec)

Certificate No: H3-6101_May08

THE PROPERTY OF	CERTIFICAT		
Object	H3DV6 - SN:61	01	
Calibration procedure(s)	QA CAL-03.v5 Calibration proc evaluations in a	edure for H-field probes optimized ir	for close near field
Calibration date:	May 19, 2008		
Condition of the calibrated item	In Tolerance		
All calibrations have been condu	cted in the closed laborati	ory facility: environment temperature (22 ± 3)*C	and humidity < 70%.
Calibration Equipment used (M&	7		277 - 1103 - 120
Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Primary Standards Power meter E4419B	ID# GB41293874	1-Apr-06 (No. 217-00788)	Apr-09
Primary Standards Power meter E4419B Power sensor E4412A	ID# GB41293874 MY41495277	1-Apr-06 (No. 217-00788) 1-Apr-06 (No. 217-00786)	Apr-09 Apr-09
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A	ID # GB41293874 MY41495277 MY41496087	1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00788)	Apr-09 Apr-09 Apr-09
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator	ID# GB41293874 MY41496277 MY41496087 SN: S5054 (3c)	1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00788) 8-Aug-07 (No. 217-00719)	Apr-09 Apr-09 Apr-09 Aug-08
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator	ID# GB41293874 MY41495277 MY41496087 SN: S5054 (3c) SN: S5066 (20b)	1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00786) 1-Apr-08 (No. 217-00786) 8-Aug-07 (No. 217-00719) 31-Mar-08 (No. 217-00787)	Apr-09 Apr-09 Apr-09
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator	ID# GB41293874 MY41496277 MY41496087 SN: S5054 (3c)	1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00788) 8-Aug-07 (No. 217-00719)	Apr-09 Apr-09 Apr-09 Aug-08 Apr-09
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe H30V6	ID# GB41293874 MY41495277 MY41496087 SN: S5054 (3c) SN: S5066 (20b) SN: S5129 (30b)	1-Apr-06 (No. 217-00788) 1-Apr-06 (No. 217-00786) 1-Apr-06 (No. 217-00786) 1-Aug-07 (No. 217-00787) 31-Mar-08 (No. 217-00787) 8-Aug-07 (No. 217-00720)	Apr-09 Apr-09 Apr-09 Aug-08 Apr-09 Aug-08
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe H3DV6 DAE4	ID# GB41293874 MY41495277 MY41496087 SN: \$5064 (3c) SN: \$5066 (20b) SN: \$5129 (30b) SN: 6182	1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00786) 1-Apr-08 (No. 217-00786) 8-Aug-07 (No. 217-00719) 31-Mar-08 (No. 217-00767) 8-Aug-07 (No. 217-00767) 8-Aug-07 (No. 217-00720) 2-Oct-07 (No. H3-6182_Oct07) 24-Apr-08 (No. DAE4-654_Apr08) Check Date (In house)	Apr-09 Apr-09 Apr-09 Aug-08 Apr-09 Aug-08 Oct-08 Apr-09 Scheduled Check
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe H3DV6 DAE4 Secondary Standards	ID # GB41293874 MY41495277 MY41498087 SN: S5054 (3c) SN: S5096 (20b) SN: S5129 (30b) SN: 6182 SN: 654	1-Apr-06 (No. 217-00786) 1-Apr-06 (No. 217-00786) 1-Apr-06 (No. 217-00786) 8-Aug-07 (No. 217-00787) 31-Mar-08 (No. 217-00787) 8-Aug-07 (No. 217-00787) 2-Oct-07 (No. H3-6182_Oct07) 24-Apr-06 (No. DAE4-654_Apr08) Check Date (in house)	Apr-09 Apr-09 Apr-09 Aug-08 Apr-09 Aug-08 Oct-08 Apr-09 Scheduled Check In house check: Oct-09
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe H3DV6 DAE4 Secondary Standards RF generator HP 8648C	ID# GB41293874 MY41495277 MY41496087 SN: S5064 (3c) SN: S5066 (20b) SN: S5129 (30b) SN: 6182 SN: 654	1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00786) 1-Apr-08 (No. 217-00786) 8-Aug-07 (No. 217-00719) 31-Mar-08 (No. 217-00767) 8-Aug-07 (No. 217-00767) 8-Aug-07 (No. 217-00720) 2-Oct-07 (No. H3-6182_Oct07) 24-Apr-08 (No. DAE4-654_Apr08) Check Date (In house)	Apr-09 Apr-09 Apr-09 Aug-08 Apr-09 Aug-08 Oct-08 Apr-09 Scheduled Check
Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe H3DV6 DAE4 Secondary Standards RF generator HP 8648C	ID # GB41293874 MY41495277 MY41496087 SN: S5054 (3c) SN: S5056 (20b) SN: S5122 (30b) SN: 6182 SN: 654 ID # US3642U01700 US37390585 Name	1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00786) 1-Apr-08 (No. 217-00786) 8-Aug-07 (No. 217-00787) 8-Aug-07 (No. 217-00787) 2-Oct-07 (No. 13-6182_Oct07) 24-Apr-08 (No. DAE4-854_Apr08) Check Date (in house) 4-Aug-99 (in house check Oct-07) 18-Oct-01 (in house check Oct-07)	Apr-09 Apr-09 Apr-09 Aug-08 Apr-09 Aug-08 Oct-08 Apr-09 Scheduled Check In house check: Oct-09
Calibration Equipment used (M&) Primary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A Reference 3 dB Attenuator Reference 20 dB Attenuator Reference 30 dB Attenuator Reference Probe H3DV6 DAE4 Secondary Standards RF generator HP 8648C Network Analyzer HP 8753E Calibrated by:	ID# GB41293874 MY41496277 MY41496087 SN: S5006 (20b) SN: S5029 (30b) SN: 6182 SN: 654 ID# US3642U01700 US37390585	1-Apr-08 (No. 217-00788) 1-Apr-08 (No. 217-00786) 1-Apr-08 (No. 217-00786) 8-Aug-07 (No. 217-00787) 8-Aug-07 (No. 217-00787) 8-Aug-07 (No. 217-00720) 2-Oct-07 (No. H3-6182_Oct07) 24-Apr-08 (No. DAE4-654_Apr08) Check Date (in house) 4-Aug-99 (in house check Oct-07) 18-Oct-01 (in house check Oct-07)	Apr-09 Apr-09 Apr-09 Aug-08 Apr-09 Aug-08 Oct-08 Apr-09 Scheduled Check In house check: Oct-09 In house check: Oct-09
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Certificate No: H3-6101_May08

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HCT-IA0810-1501 FCC ID: US7-A100 **Date of Issue:** Nov.11, 2008

Calibration Laboratory of

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





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Accreditation No.: SCS 108

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Glossary:

NORMx,y,z DCP

sensitivity in free space diode compression point o rotation around probe axis

Polarization φ Polarization 9

3 rotation around an axis that is in the plane normal to probe axis (at

measurement center), i.e., 9 = 0 is normal to probe axis

Connector Angle

information used in DASY system to align probe sensor X to the robot

coordinate system

Calibration is Performed According to the Following Standards:

a) 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:

- X,Y,Z_a0a1a2: Assessed for E-field polarization θ = 90 for XY sensors and θ = 0 for Z sensor (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide).
- X,Y,Z(f)_a0a1a2= X,Y,Z_a0a1a2* frequency_response (see Frequency Response Chart).
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency.
- Spherical isotropy (3D deviation from isotropy): in a locally homogeneous field realized using an open waveguide setup.
- 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 X_a0a1a2 (no uncertainty required).

Certificate No: H3-6101_May08

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H3DV6 SN:6101

May 19, 2008

Probe H3DV6

SN:6101

Manufactured: December 10, 2001

Last calibrated: July 25, 2007 Recalibrated: May 19, 2008

Calibrated for DASY Systems

(Note: non-compatible with DASY2 system!)

Certificate No: H3-6101_May06

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H3DV6 SN:6101 May 19, 2008

DASY - Parameters of Probe: H3DV6 SN:6101

Sensitivity in Free Space [A/m / √(µV)]

	a0 a	11	a2	
X	2.818E-3	2.575E-5	-3.338E-5	± 5.1 % (k=2)
Y	2.820E-3	-7.302E-5	-5.136E-5	± 5.1 % (k=2)
Z	2.981E-3	5.189E-5	2.858E-6	± 5.1 % (k=2)

Diode Compression¹

DCP X 84 mV DCP Y 84 mV DCP Z 85 mV

Sensor Offset (Probe Tip to Sensor Center)

X 3.0 mm Y 3.0 mm Z 3.0 mm

Connector Angle 27 °

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%.

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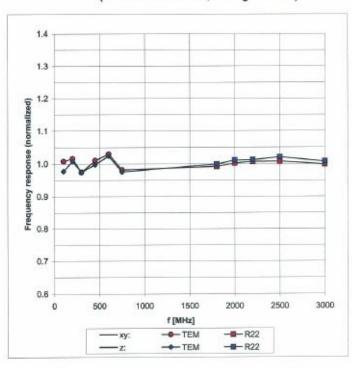
¹ numerical linearization parameter: uncertainty not required

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Frequency Response of H-Field

(TEM-Cell:ifi110 EXX, Waveguide R22)



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

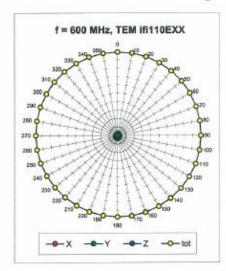
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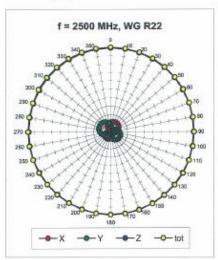
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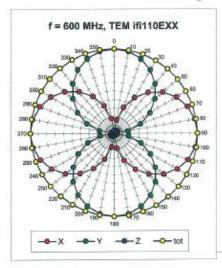
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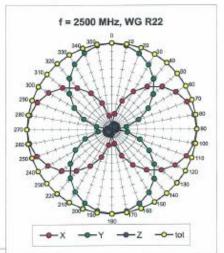
Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$





Receiving Pattern (φ), θ = 90°



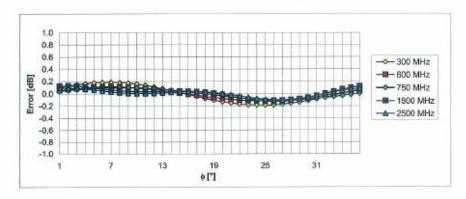


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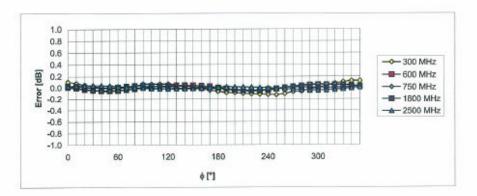
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Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$



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

Receiving Pattern (\$\phi\$), \$\theta = 90°

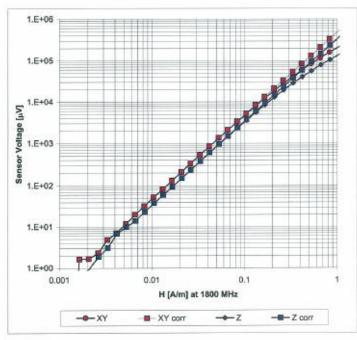


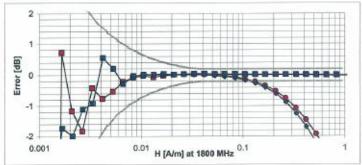
Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

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Dynamic Range f(H-field) (Waveguide R22, f = 1800 MHz)



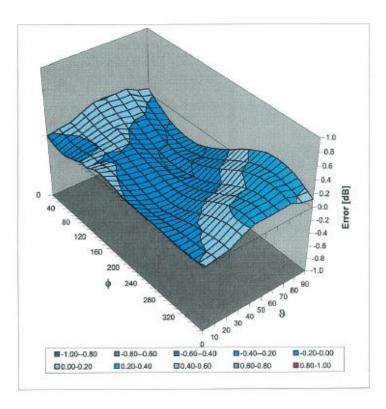


Uncertainty of Linearity Assessment: ± 0.6% (k=2)

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Deviation from Isotropy in Air Error (ϕ, ϑ) , f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

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