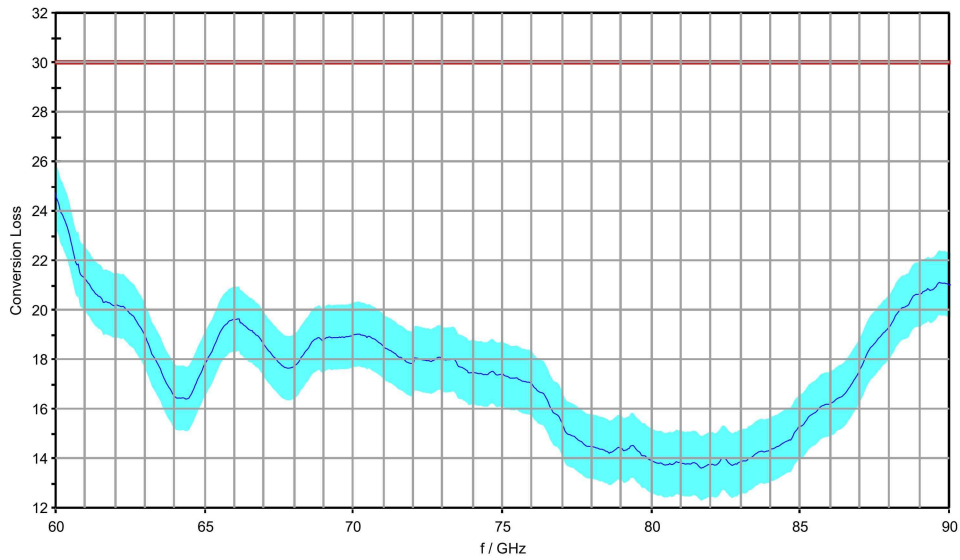


## 1. Conversion Loss (6. Harmonic)

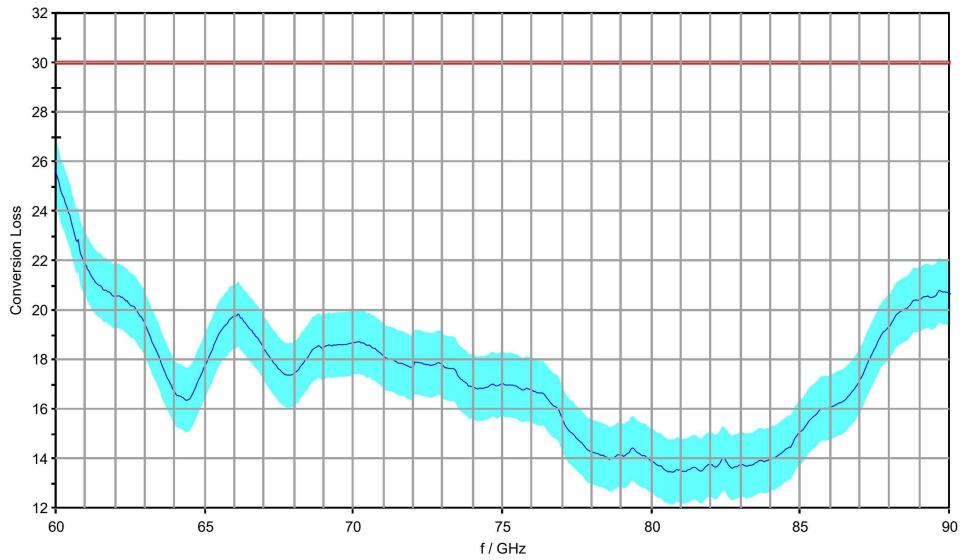
### 1.1 Conversion Loss (IF = 404.4 MHz)

IF = 404.4 MHz, 6. Harmonic



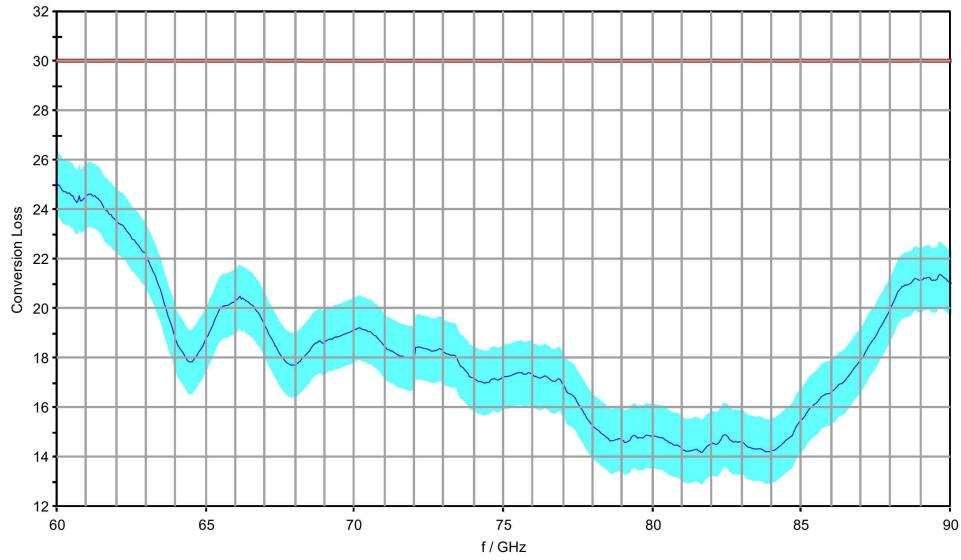
### 1.2 Conversion Loss (IF = 729 MHz)

IF = 729 MHz, 6. Harmonic



### 1.3 Conversion Loss (IF = 1330 MHz)

IF = 1330 MHz, 6. Harmonic



### 1.4 Continuity response within 1 GHz

Continuity response within any 1 GHz Band, 6. Harmonic

	DUL /dB	Continuity /dB
max. at IF = 404.4 MHz:	6.0	3.46
max. at IF = 729 MHz:	6.0	3.80
max. at IF = 1330 MHz:	6.0	3.42

## Incoming Results

Designation:	HARMONIC MIXER
Type:	FS-Z90
Material No.:	1048.0371.02
Serial No.:	101811
Certificate No.:	0001A300623436
Referring to Test Documentation:	5038.8323.01-PB-02.00

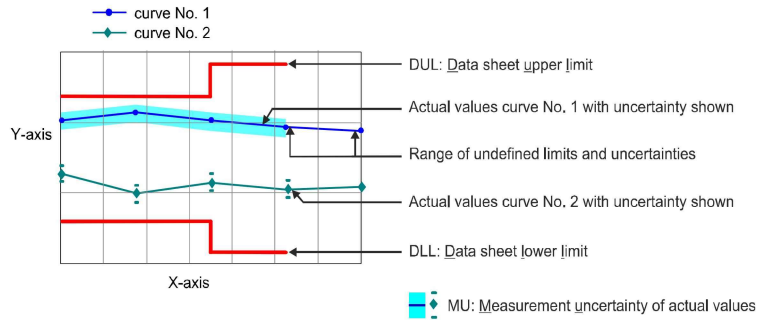
Test Department:	3MM-P
Name:	Michael Haupt
Date:	2021-11-16



**The following abbreviations may be used in this document**

- {a} No measurement uncertainty stated because the errors always add together. So it is sure that a measurement result evaluated as "PASS" is pass.
  - {b} The measurement uncertainty depends on the measurement result. The stated measurement uncertainty is valid for the close area around the specification. Measurement results outside the close area have a higher measurement uncertainty but are within the specification.
  - {c} Functional test, therefore no measurement uncertainty is stated.
  - {d} Typical value, refer to performance test.
  - {e} The measurement uncertainty is taken into account when setting the measuring system.
  - {f} Verification of specified requirements. Technical operation that consist of the determination of one or more characteristics to a specified procedure.
- DL or DT Data Limit for symmetrical tolerance limits
  - DLL Datasheet Lower Limit
  - DUL Datasheet Upper Limit
  - MU Symmetrical Measurement Uncertainty
  - MLL or MLV Measurement Uncertainty Lower Value
  - MUL or MUV Measurement Uncertainty Upper Value
  - Nom. Nominal Value
  - Dev. Deviation
  - Act. Actual Value
  - UGB Uncertainty Guard Band: Measuring uncertainty violates the data (spec.) limit.
  - UGB1 A compliance statement may be possible where a confidence level of less than 95 % is acceptable.
  - UGB2 A non-compliance statement may be possible where a confidence level of less than 95 % is acceptable.
  - DU Datasheet Uncertainty

**Explanation of charts**



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Material Number 1048.0371.02 Serial Number 101811

**Certificate Number 0001A300623436**  
(Incoming)

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Software used for measurement			
Item	Type	Version	Remark
Suite	Setup	V12.10.02	Test Management Software G5
Test Program (7012.8706.00_)	Component	V01.05	

**Incoming Results**