ZC330

ZC330 Millimeter-Wave Converters

Part-No.: 1323.7669.02

Product Description

Key Features:

- variable output power
- wide dynamic range
- wide frequency range
- highly stable measurement
- convenient handling

Radiometer Physics GmbH
Werner-von-Siemens-Str. 4
53340 Meckenheim, Germany
+49 (0) 2225 99981 — 0
www.radiometer-physics.de
info@radiometer-physics.de

Technical Specifications

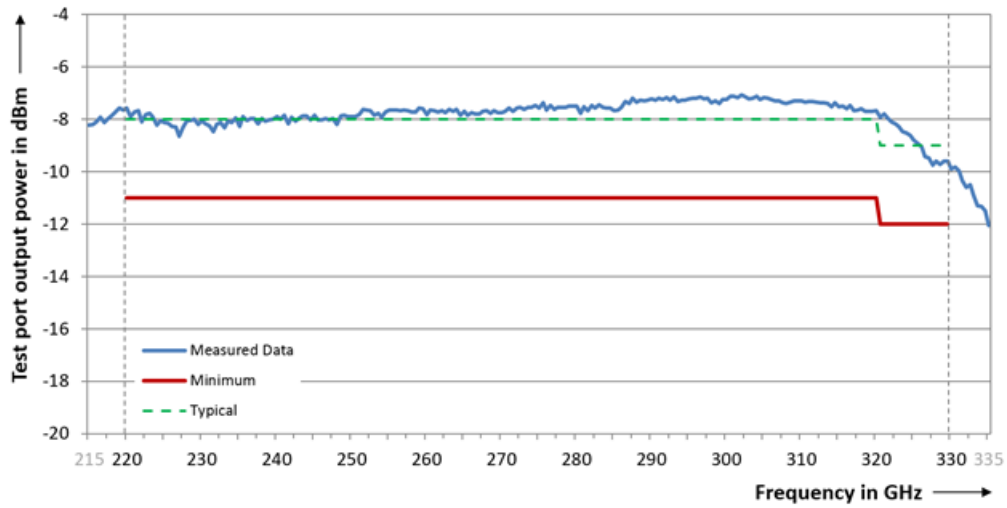
Test Port	
Frequency Range [GHz]	220 to 330
Port Type	WM-864 (UG387/U flange compatible)
Output Power [dBm (typ.)]	220 to 320 GHz > -11 dBm (n.trc.), typ. -8 dBm 320 to 330 GHz > -12 dBm (n.trc.), typ. -9 dBm
Output Power Attenuation [dB]	0 to 40
Input Power Damage Level [dBm]	+20
Stability (Magnitude [dB] / Phase [°] (typ.))	typ. < 0.4 dB and typ. < 6°
Source Input (RF IN)	
Frequency Range [GHz]	12.22 to 18.33
Port Type	2.92 mm, female
Input Power Range [dBm]	-15 to +10
Local Oscillator Input (LO IN)	
Frequency Range [GHz]	9.15 to 13.73
Port Type	SMA, female
Input Power Range [dBm]	+5 to +10
Measurement Output (MEAS OUT)	
Frequency Range [MHz]	5 to 2000
Port Type	SMA, female
Reference Output (REF OUT)	
Frequency Range [MHz]	5 to 2000
Port Type	SMA, female
System Characteristics	
Source match (without system error correction)	> 20 dB (n.trc.)[1]
Directivity (without system error correction)	> 20 dB (n.trc.)[1]
Dynamic Range [dB]	> 100, typ. 115

Dynamic range is defined as the difference between the data trace of the transmission magnitude with maximum test port output power and both test ports through-connected on the one hand and the RMS value of the data trace of the transmission magnitude produced by noise and crosstalk with test ports short-circuited on the other. The specification is valid without system error correction and at 10Hz measurement bandwidth. The dynamic range can be increased by using a measurement bandwidth of 1Hz.

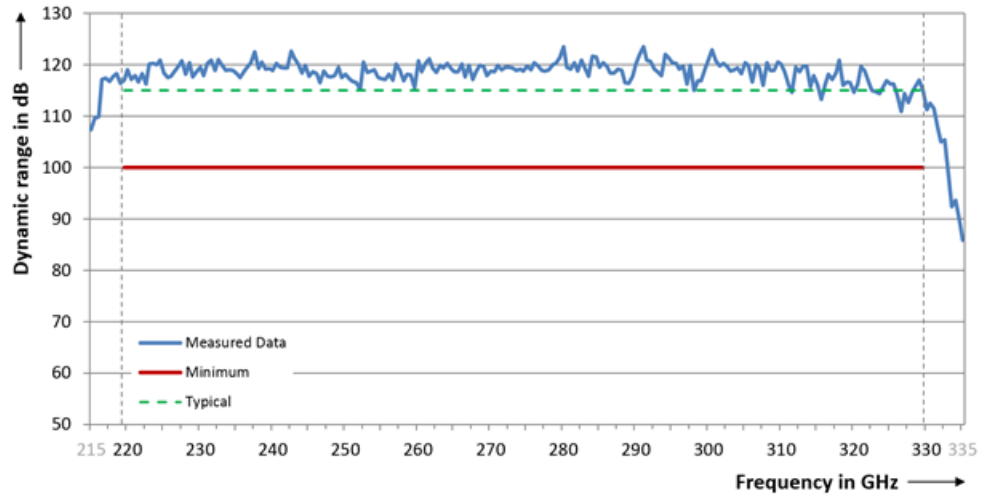
[1] Without consideration of measurement uncertainty.

Typical Performance

Radiometer Physics GmbH
Werner-von-Siemens-Str. 4
53340 Meckenheim, Germany
+49 (0) 2225 99981 — 0
www.radiometer-physics.de
info@radiometer-physics.de



Test port output power versus frequency of the R&S®ZC330.



Dynamic range versus frequency of the R&S®ZC330

Radiometer Physics GmbH
Werner-von-Siemens-Str. 4
53340 Meckenheim, Germany
+49 (0) 2225 99981 — 0
www.radiometer-physics.de
info@radiometer-physics.de

Radiometer Physics GmbH
Werner-von-Siemens-Str. 4
53340 Meckenheim, Germany
+49 (0) 2225 99981 — 0
www.radiometer-physics.de
info@radiometer-physics.de