

SCHWARZBECK MESS - ELECTRONICS

On the blade 29 D-69250 Schönau Tel.: 06228/1001 Fax.: (49) 6228/1003

Generating defined Felsdstärken BBHA 9120 B Generating defined Field Strength BBHA 9120 B 1 - 10 GHz

Field strength generated under Free space-conditions in front of the aperture of the horn antenna (see sketch and details in the distance). If environmental reflections are present,

this can lead to frequency- and perform height dependent change in the field strength. The performance data refer to a 50 Ω

Source impedance and an unmodulated (CW). At 80% amplitude modulation, the 1.8-times higher voltage is required, resulting in an approximately 3.24-times the power requirement

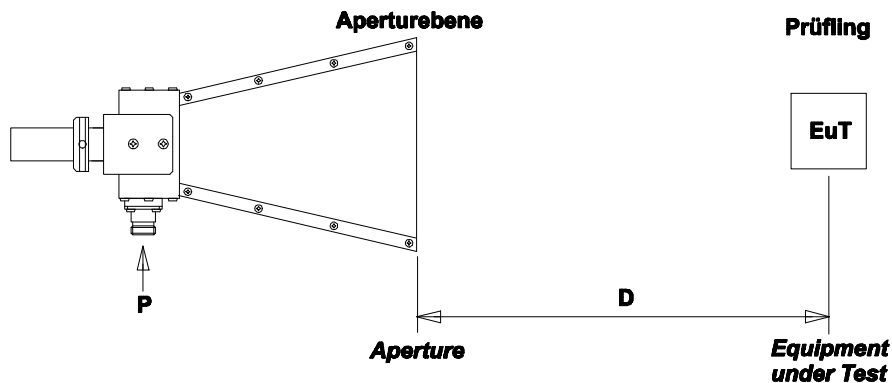
results to Increase the field strength by a factor of 10 to 100 times the amplifier power is required.

Field strength generated under free-space conditions at a separation from the antenna aperture
(See diagrams for several Combinations of power and distance). If environmental reflections are present, this may lead to frequency and height dependent field strengths. The power figures refer to a 50 Ω source and to unmodulated (cw) signal. At 80% amplitude modulation requires a 1.8 times higher voltage, Resulting in 3.24 times higher power Compared To cw. A field strength increase of factor 10 requires 100 times amplifier-power.

must in the production of high field strengths the relevant safety regulations and standards are observed! Failure to follow these instructions can cause damage to the health!

The safety Precautions and relevant standards must be Considered while performing Testing with high field strength! Ignoring this standards and Precautions may result in severe danger for health!

Modulation (AM)	50%	60%	70%	80%	90%	95%		Modulation (AM)		
power factor	2.25		2.56		2.89		3.24	3.61	3.8	Power Factor
Additional power requirement [DB]	+ 3.5		+ 4.1		+ 4.6		+ 5.1	+ 5.6	+ 5.8	Additional Power Requirement [DB]



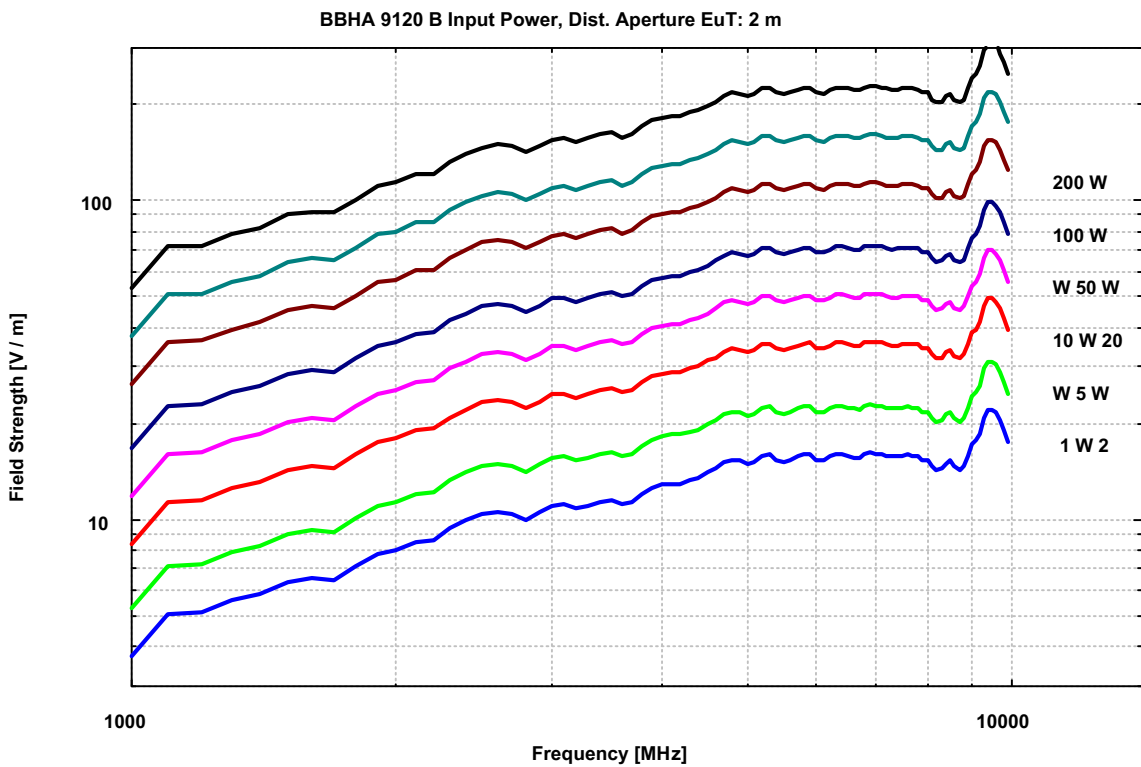
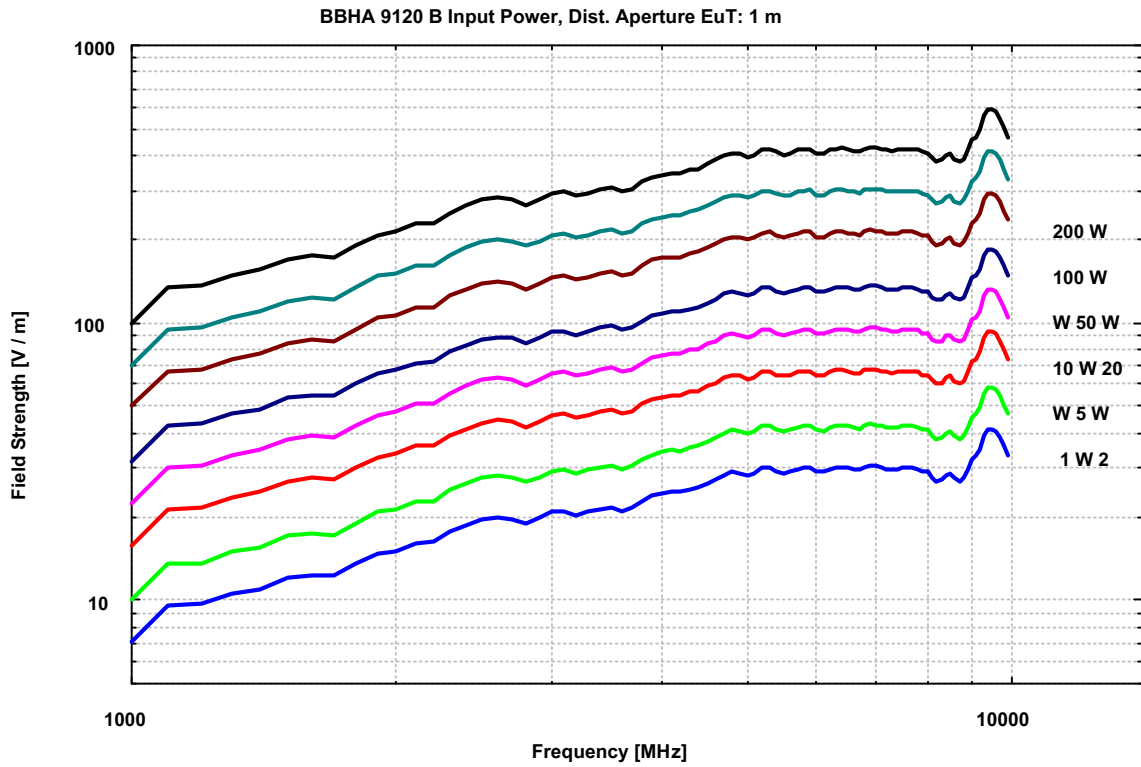
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BBHA 9120 B generated field strength *BBHA 9120 B Generated Field Strength*

unmodulated generated electric field strength in front of the antenna tip, input power to
N female, reflection-free environment

Generated Electrical Field Strength in front of Antenna Tip
no modulation, Input Power at N-Connector, Anechoic Environmental Conditions



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