



HÖFT & WESSEL

Subject: Höft & Wessel AG
FCC ID: PGMHW901960001

RF Safety Calculation

Determination of permitted Power Density at 2.4 GHz for 100 mW / 1W according to IEEE Std. C 95.1 for

HW 90196
Manufacturer: Höft & Wessel

1. Power density

$$S = \frac{P_r}{4 r^2 \pi}$$

P_r - radiated power
 r - distance

2. Calculated power density values for 100 mW (20 dBm) and 1 W (30 dBm)

distance	Power density	
cm	mW / cm ²	
	100 mW	1 W
20	0,02	0,2
5	0,32	3,2

Concerning the measured duty cycle of .4,2 % the device provides an averaged radiated power of less then ..5.. mW.

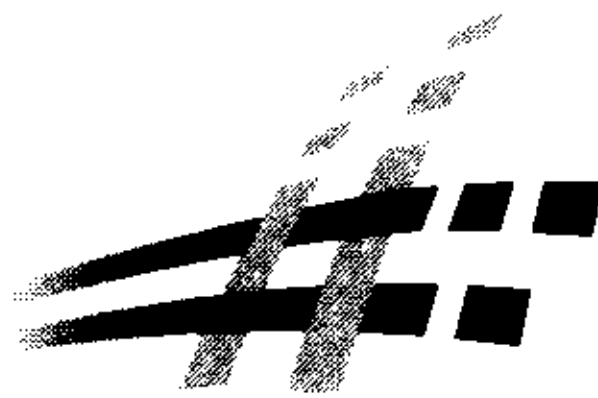
3. Limit according IEEE Std. C 95.1

Frequency range 300 - 3000 MHz : $S_L = f / 1500$

For 2.4 GHz: $S_L = 1,6 \text{ mW / cm}^2$

4. Assessment

The sample complies to the MPE requirements because the radiated output power provide a power density as calculated according to the formula above, below the requested limits.



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Hannover, 06/14/01
KOE

Applicant's declaration concerning RF Radiation Exposure

We hereby indicate that the product
Vectron POS Mobile Terminal / US (HW90196 / US)
is considered to be a hand-held use only transceiver.

The conducted output power is maximum 116mW. The internal antennas used for this hand-held use only transmitter must provide a separation distance of at least 20 cm from all persons except hands and wrists and must not be co-located or operating in conjunction with any other antenna or transmitter.

A safety statement concerning minimum separation distances and operating conditions will be integrated in the user's manual to provide end-users with sufficient information for satisfying RF exposure compliance.

The appropriate information can be drawn from the test report GOM20012-3597-T-47 and the accompanying calculations.

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