



Electrical (EMC)

DATE: 07 October 2002

I.T.L. (PRODUCT TESTING) LTD.

EMC Test

for

Nexus Data (1993) Ltd.

Equipment under test:

Network Transceiver/Repeater

(For Transmitter Section)

P3V7-89

Approved by: _____

I. Raz, EMC Laboratory Manager

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This report relates only to items tested.



Electrical (EMC)

Measurement/Technical Report for Nexus Data (1993) Ltd.

Network Transceiver/Repeater (For Transmitter Section)

P3V7-89

FCC ID:NL3NTR0001

07 October 2002

This report concerns: Original Grant x Class II change

Class B verification Class A verification Class I change

Equipment type: Radio Telemetry Transmitter

Request Issue of Grant:

 x Immediately upon completion of review

Limits used:

CISPR 22

Part 15 x

Measurement procedure used is ANSI C63.4-1992.

Application for Certification

prepared by:

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Applicant for this device:

(different from "prepared by")

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16. R.F Exposure/Safety

The E.U.T. is installed in fixed locations for application of transmitting data of gas consumption to central data collection offices. The distance between the E.U.T. and the general population is at least two meters.

Calculation of Maximum Permissible Exposure (MPE)

Based on Section 1.1307(b)(1); 1.1310 Requirements for General Population/ Uncontrolled Exposures.

(a) FCC limits at 903.8 MHz

$$S = \frac{903.8}{1500} = 0.6 \frac{mW}{cm^2}$$

(b) The power density produced by the E.U.T. is

$$S = \frac{P_t G_t}{4\pi R^2}$$

P_t- Transmitted Power 1000mw (Peak)

G_T- Antenna Gain, 2(3dBi)

R- Distance from Transmitter using 1m worst case

(c) The peak power density is :

$$S_p = \frac{10^3 \times 2}{4\pi(100)^2} = 0.016 \frac{mW}{cm^2}$$

(d) This level is significantly below the FCC limit.