

Company: Zebra Technologies Corporation Model Tested: R402 Report Number: «REPORT\_NO\_EMISSIONS»

1250 Peterson Dr., Wheeling, IL 60090

## 5.0 TEST EQUIPMENT (Bandwidths and Detector Function)

All preliminary data was automatically plotted using the Peak or CISPR Detector Functions. This information was then used to determine the frequencies of maximum emissions. Manual measurements were performed on these frequencies using a peak detector function of the Receiver with the bandwidths specified by the FCC.

The final data was taken using the fixed tuned receiver. Plots were made using the Peak Detector, with manual measurements made on the frequencies of interest, using the Peak, CISPR, and Average Detector Functions of the receiver. When average measurements were made using the fixed tuned receiver, the average was taken of a linear IF signal as specified by FCC and ANSI C63.4-1992.

The fundamental, harmonic and spurious frequencies were measured using the CISPR Quasi-Peak Detector as stated in Section 15.209. From 10 kHz to 30 MHz a bandwidth of 9 kHz was used and from 30 MHz to 1000 MHz a bandwidth of 120 kHz was used to ensure proper measurement of the narrowband signal.

A list of the equipment used can be found in Table 1. All equipment was calibrated per the instruction manuals supplied by the manufacturer.

## 6.0 CONDUCTED EMISSION MEASUREMENTS

The conducted emissions were measured over the frequency range from .45 MHz to 30 MHz in accordance with the power line measurements, as specified in ANSI C63.4-1992. Since the device is operated from the public utility lines, the 120 Vac, 60 Hz power leads, high and low sides were measured by connecting the measuring equipment to the appropriate meter terminal of the LISN. All signals were then recorded. The allowed levels for Intentional Radiators cannot exceed 250 uV (47.96 dBuV) at any frequency between 450 kHz and 30 MHz, as stated in Section 15.207a.

## NOTE:

All test measurements were made at a screen room temperature of  $68\,^\circ F$  at 29% relative humidity.