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December 22, 2003

RE: Savi Technology

FCC ID: KL7-650MR-V1

In response to your comments dated December 22, 2003.

1) The description of the test sample on page 6 of 22 appears incorrect (Lasershield Systems, etc.). Please review.

The report has been corrected to reference the Savi device.

2) Measurements using the loop antenna should be checked by positioning of the loop antenna in all 3 axes. It appears that only 2 axes were checked. Please provide further information.

The antenna was placed orientate in X and Y axes but not in the Z axes (loop parallel to the ground) because the EUT was rotated through all three orthogonal axes. Please advise if you need additional data with the antenna parallel to the ground.

3) Page 6 of 14 mentions an 81.1 dB correction factor $(54.9 \log(10/300)=81.1$. However, it is not apparent how the level of 9.6 dBuV/m was derived. From the description given, it appears that 73.2 dBuV/m (measured at 10 meters) - 81.1 dB = -7.9 dBuV/m. It appears that one of the measurements @ 3 meters may have been used. Please explain and/or correct as necessary.

The test data shows an incorrect application of extrapolation factor to the data. The correct level is -7.9dBuV/m.

4) Please add correct unit to Limit Column on page 6 of 14.

There is no unit for the limits in the data table. The references to dBuA/m in the notes are for reference only (for European standard EN 300 330).

5) Measurements on page 6 of 14 mention that they are taken using a QP detector. Note that 15.209(d) does not allow for the QP detector in the range of 110 - 490 kHz. Please provide PEAK measurements for this band.

The test data is incorrectly annotated. All measurements were made using a peak detector. The levels of harmonics were verified during a preliminary scan using a peak detector and all were beneath the noise floor, with more than 20dB of margin to the limit.

6) Page 7,11, & 13 of 14 mentions that all measurements below 1 GHz are taken at 10 meters unless otherwise stated. However the limits applied for these sections appear to be at 3 meters. Therefore the measurements should be taken at 3 meters, otherwise measurements are being compared against limits that would not apply. Please explain.

The test data is incorrectly annotated. All measurements were made at a test distance of 3m with the exception of the 123kHz signal (measured at 3m and at 10m) and the measurements made against the limits of EN 55011 (measured at 10m).

7) The 433.92 MHz transmitter appears to work at 4 different power levels as follows from highest to lowest power:

a) Control Signal (has relevant 24% duty factor)

b) Wake Up Signal (has essentially 0% duty factor)

- c) Data Signals (15.231e) (has relevant 10% duty factor)
- d) Data Signals (15.209)

Please confirm that our understanding is correct.

Correct with the following exceptions:

- a) Control Signal (has relevant <u>25%</u> duty factor)
- b) Wake Up Signal (has essentially 0% duty factor)
- c) Data Signals (15.231e) (has relevant 10% duty factor)
- d) Data and Control Signals (15.209)

8) Information regarding compliance to 433.92 MHz transmissions under 15.209 do not appear to be provided in the report. Please provide.

The test data sheet was omitted form the original report. Test data was taken on December 11^{th} and has been included in the revised report.

I hope this answers all of your questions, a revised report has been uploaded to the ATCB website.

Regards

Mark Briggs