RE: Savi Technology

FCC ID: KL7-654T-V1

1) The label appears to be applicable to 4 different models, while the users manual and other information given in this application appears to only cover 2 models. Please provide an explanation of the differences between the additional -003 and -004 models and whether this application is expected to cover these models.

Answer to question 1 is: The label drawing provided represents the labels applied to the ST-654-00X Tags during different levels of compliance approval. The -004 label (FCC) will be applied only to tags that go to customers intending to use them in the US. The -003 label (FCC and CE Self Declaration) will be applied to tags that go to customers intending to use them in the US and/or Europe. The -002 label (FCC, Industry Canada and CE Self Declaration) will be applied to tags that go to customers intending to use them in the US, Canada and/or Europe. The -001 label (FCC, Industry Canada and CE Notified Body) will be applied to tags that go to customers intending to use them in the US, Canada and/or Europe. Savi intends to place these labels on two models at this time which differ only in memory size. Since it is not possible to obtain all type approvals at the same time and Savi needs to ship products as soon as possible, it becomes necessary to have different labels created. Savi always makes sure that the tags shipped have proper type approval for the country intended for use. Eventually, all approvals will be obtained and the -001 label will only be used.

2) This device contains multiple modes of transmission, which all modes appear to fall under 15.231(e). However, the theory of operation does not directly stipulate which section of the rules the "beacon mode" falls under. Please clarify.

Answer to Question 2 is: The Theory of Operations states: "Beacon Mode transmissions are averaged per FCC 15.35 and comply with the requirements of Section 15.231(e) field strength and duty factor." Please refer to page 9 of 14.

3) It appears that all aspects of transmit fall under 15.231(e). However the theory of operation page 4 and users manual mentions a 300 ft distance at 433.92 MHz for the SaviTag 654. Is this distance correct given the power output only meeting 15.231(e)?

Answer to question 3 is: The 300 foot range mentioned is line-of-site. Please remember that transmissions are averaged per FCC 15.35 and comply with the requirements of Section 15.231(e) field strength and duty factor.

4) My information given in the users manual, this device has been approved to class A digital device emissions. Please note that the 433.92 MHz receiver portion of the device is required to meet limits that are more stringent (equivalent to class B levels). Please explain how this was accomplished.

Answer to question 4 is: The receive-mode emissions and digital device emissions actually meet FCC Class B limits, although the device is a Class A device (not for use in residential environments). The test data (page 7 of 7) contains the results for testing the receiver (LO and second/third harmonics), showing emissions below the 15.109 limit at 3m for a receiver or Class B digital device.

5) The test report does not appear to show any antennas for < 200 MHz. The 30 - 2000 MHz band is expected to be investigated to ensure any down conversion, digital device emissions, etc. are not of concern. Please correct/comment.

Answer to question 5 is: Preliminary measurements form 30Mhz to 4Ghz were made in an anechoic chamber to identify the frequencies of significant emissions. Only the emissions related to the fundamental signal, its harmonics and the LO were observed. All final measurements were made on an OATS at those frequencies. The biconical antenna used for the preliminary measurements was: EMCO Biconical Antenna model 3110B, asset # 1320, calibration due 20-Aug-04.

6) Exhibit 2 (page 2 of 2) of the test report mentions applicable data for a different model device. Please correct/comment.

Answer to question 6 is: The heading for this Exhibit is incorrect and has been revised.

7) Please comment on the RBW/VBW setting used for radiated emissions.

Answer to question 7 is: Page 10 of 18 of the test report states that peak measurements above 1GHz are made using RBW=VBW=1MHz and that below 1GHz a test receiver is used. Peak measurements below 1GHz are made using a test receiver with bandwidth set to 120kHz and peak detector or QP detector as identified in the test data tables. Peak measurements above 1GHz were made with RBW=VBW=1 MHz. Average measurements were calculated from the peak measurements by applying the duty cycle correction factor (20dB), as detailed in the test data

If you need any other information, please let me know.

Sincerely,

Mark Briggs