

QUESTION 7: PURPOSE OF EXPERIMENT

- a. The complete program of research and experimentation proposed including description of equipment and theory of operation.**
- b. The specific objectives sought to be accomplished.**
- c. How the program of experimentation has a reasonable promise of contribution to the development, extension, expansion or utilization of the radio art, or is along line not already investigated.**

The proposed program of research is to conduct technical demonstrations and limited market studies of passive UHF frequency RFID tags. The equipment will include OEM RFID readers covering frequencies from 800 MHz to 1000 MHz with a maximum transmitting power of 32 dBm attached to circularly and linearly polarized antenna with a directional gain of less than 6 dBi.

These systems will be used to test read rate, link margin and sideband energy level of RFID tags on various substrates at various positions from the antenna for purposes of market studies and technical demonstrations of tags and tag measurement techniques.

The program of experimentation will advance research in the field of RFID tag antenna development, especially along the lines of broad frequency range tags that will work world wide.