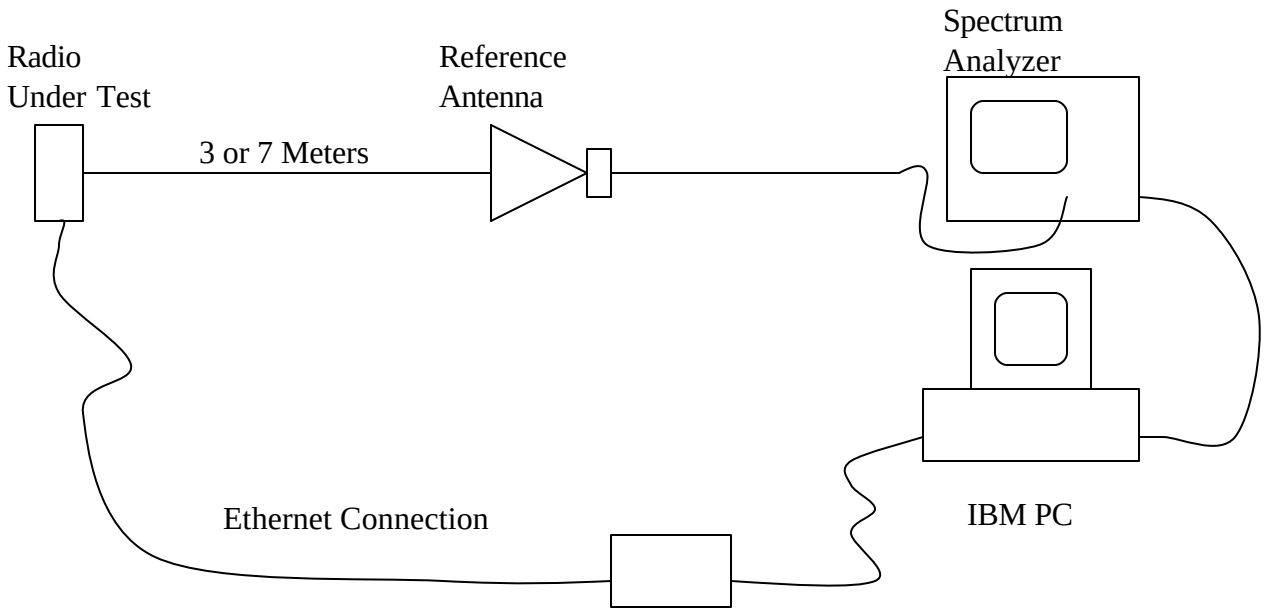The test setup diagram is as follows: