

Preliminary Test Description	Test Number	Procedure	Equipment Needed	Pass Requirement	Engineering Specification(s)	Customer Need(s)
Verify Mass	T1	Setup required equipment and record measured weight	Scale (.01 kg accuracy)	<.3kg	ES1	CN7, CN8
Verify Configuration	T2	Allow technician to configure device independently	Pair of boards and dedicated space/room	Technician can successfully configure device without outside instruction	ES2	CN1, CN6
Verify Tx Frequency	T3	Setup required equipment and record measured bandwidth	Spectrum analyzer and low noise/interference space/room	Frequency Complys with FCC Regulation	ES4	CN2, CN5
Test the Number of Channels	T4	Setup three sets of communication boards and measure BER	Three sets of boards and dedicated space/room	Three operating sets with Passable BERs	ES5	CN2, CN5
Verify Transmit Power	T5	Setup required equipment and record measured output power	Spectrum analyzer and low noise/interference space/room	<30dBm	ES6	CN2, CN4
Verify Data Rate	T6	Setup required equipment and record data rate	TI Software for transmitting data, evaluation kits, computers, a set of boards	>40kbps	ES7	CN5
Verify Range	T7	Setup required equipment and record BER at varying distances	TI Software for transmitting data, evaluation kits, computers, a set of boards	<.12 at 100m	ES8	CN2, CN4
Verify Regulatory Compliance	T8	Inspect tests T3 and T5 to ensure regulatory compliances are met	Test results from T3 and T5	Test results meet regulatory compliances	ES9	CN5
Verify BER	T9	Setup required equipment and measure BER at 10m	TI Software for transmitting data, evaluation kits, computers, a set of boards	<.12	ES10	CN4
Printed Documentation	T10	Inspect printed documenation	Printed documentation	A document exists	ES12	CN9
Verify Interface Specification Compliance	T11	Inspect if interface requirements are met	Physical board measurements from T12, T13, T14, and overall documentation	Interface requirements are met	ES13	CN1
Verify Width	T12	Setup required equipment and record measured distance	A board and caliper	9 +/- .127 cm	ES14	CN7
Verify Length	T13	Setup required equipment and record measured distance	A board and caliper	7 +/- .127 cm	ES15	CN7
Verify Height	T14	Setup required equipment and record measured distance	A board and caliper	<3cm	ES16	CN7
Verify Price Per Board	T15	Calculate total cost of components	Calculator/Spreadsheet and datasheets of components	<\$300	ES18	CN10