OPERATIONAL DESCRIPTION

The device is a Wireless Hub.

The EM357 is the industry's leading ARM® Cortex®-M3 based family of ZigBee SoCs delivering unmatched performance, power consumption and code density in a compact package. The EM35x and EM358x families combine a 2.4 GHz IEEE 802.15.4 radio transceiver with a 32-bit microprocessor, Flash memory and RAM with powerful hardware supported network-level debugging features. Combined with the powerful ecosystem of ARM tools, these devices and tools enable OEMs to simplify development and accelerate time to market.

The General Information of the Device

Operation Frequency	2405.00-2480.00MHz, (Channel Number: 16, Channel Frequency=2405+5(K-1), K=1, 2, 3 ……16)
Main Chipset	EM357
OSC	24MHz
RF Output Power	13.99dBm(Max)
Channel Spacing	5MHz
Modulation	OQPSK
Number of channels	16
Hardware Version	1.00
Software Version	1.00
Antenna Designation	Fixed Antenna
Antenna Gain	1.0dBi(Max.)
Power Supply	DC12V

The equipment under test (EUT) is a transmitter of 2.405-2.480GHz wireless hub.

The EM357 TXpath produces an O-QPSK-modulated signal using the analog front end and digital baseband. The area and power efficient Tx architecture uses a two-point modulation scheme to modulate the RF signal generated by the synthesizer. The modulated RF signal is fed to the integrated PA and then out of the EM357.