

## Operational Description

This device is a Wireless N Router, which operates in the 2.4GHz frequency spectrum with throughput of up to 300Mbps which OFDM technique will be applied. If the signal to noise ratio is too poor which could not support 300Mbps, the 11Mbps data rate with DSSS technique will be applied.

1. There are two antennas provided to this EUT, please refer to the following table:

Transmitter Circuit	Antenna Type	Gain (dBi)	Antenna Connector	Note
Chain(0)	Dipole	2.1	MHF	With TX & RX tion
Chain(1)	Dipole	2.0	MHF	With TX & RX tion

2. The EUT incorporates a MIMO function with 802.11b, 802.11g, draft 802.11n. Physically, the EUT provides two completed transmitter and two completed receivers.
3. The EUT is 2 \* 2 spatial MIMO without beam forming function. The antenna configurations are two transmitter antennas and two receiver antennas, as there are 2 Dipole antennas. Spatial multiplexing modes for simultaneous transmission using 2 antennas, and for simultaneous receiver using 2 antennas. The 11b/g legacy mode is limited to single transmitter only.
4. When the EUT operating in draft 802.11n, the software operation, which is defined by manufacturer, MCS (Modulation and Coding Schemes) from 0 to 15.
5. The EUT complies with draft 802.11n standards and backwards compatible with 802.11b, 802.11g products.
6. The EUT operates in the 2.4GHz frequency spectrum with data rate up to 300Mbps.
7. The EUT must be supplied with a power adapter as following:

<b>Brand:</b>	D-Link
<b>Model No.:</b>	AF1805-A
<b>Input power :</b>	AC100-120V, 0.4A, 50-60Hz, 2PIN
<b>Output power :</b>	DC 5.0V, 2.5A Cable:1.8m/unshielded/without core

8. For radiated emissions test, the EUT was pre-tested in chamber under the following modes:

Test Mode	Description
Mode A	Level-set (Put on tabletop)
<b>Mode B</b>	<b>Tower-set (Wall-mounted)</b>

From the above modes, worse case was found in **Mode B**. Therefore only the test data of the mode was recorded in this report.

9. The EUT, operates in the 2.4GHz frequency range, lets you connect IEEE 802.11g or IEEE 802.11b and draft 802.11n technique devices to the network.
10. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.