RF EXPOSURE

Standard Applicable

FCC §15.247 (i), § 1.1307(b)(1) and §2.1091;

According to FCC § 1.1307(b)(1), the systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

This EUT is a Notebook Computer.

Limits for General Population/Uncontrolled Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Averaging Time (minute)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*($180/f^2$)	30
30-300	21.7	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz
* = Plane-wave equivalent power density

According to FCC §1.1310 and §2.1091, RF exposure is calculated.

Result: Compliance

This EUT is a Notebook Computer, installed with one 802.11b/g/n (20/40MHz) wireless USB mini card inside (AW-NU706); and WLAN antennae installed in the lid (display) which provides at least 20 cm separation from the user body with the lid open (at top of display section); please refer to 80815201-RP1 report, FCC ID: TLZ-NU706, i.e., 47 CFR FCC Part 15 Subpart C § 15.247.

$S = PG/4\pi R^2$

Where: S = power density
P = power input to antenna
G = power gain of the antenna
R = distance to the center of radiation of the antenna

802.11b mode:

Maximum peak output power at antenna input terminal:	16.66dBm
Maximum peak output power at antenna input terminal:	46.34mW
Prediction distance:	20 cm
Prediction frequency:	2412 MHz
Antenna gain (actual):	1.8dBi
Antenna gain (numeric):	1.51
Power density at the predication frequency at 20 cm:	0.014mW/cm^2

802.11g mode:

Maximum peak output power at antenna input terminal:	17.58dBm
Maximum peak output power at antenna input terminal:	57.28mW
Prediction distance:	20 cm
Prediction frequency:	2412 MHz
Antenna gain (actual):	1.8dBi
Antenna gain (numeric):	1.51
Power density at the predication frequency at 20 cm:	0.017mW/cm^2

802.11n (20MHz) mode:

Maximum peak output power at antenna input terminal:	16.31dBm
Maximum peak output power at antenna input terminal:	42.76mW
Prediction distance:	20 cm
Prediction frequency:	2412 MHz
Antenna gain (actual):	1.8dBi
Antenna gain (numeric):	1.51
Power density at the predication frequency at 20 cm:	0.013mW/cm^2

802.11n (40MHz) mode:

Maximum peak output power at antenna input terminal:	14.24dBm
Maximum peak output power at antenna input terminal:	26.55mW
Prediction distance:	20 cm
Prediction frequency:	2422 MHz
Antenna gain (actual):	1.8dBi
Antenna gain (numeric):	1.51
Power density at the predication frequency at 20 cm:	0.008mW/cm^2

Test Results: All of above results are compliance with the limit of 1.0 **mW/cm^2**