FCC 47 CFR MPE REPORT

for

Compex Systems Pte Ltd

WIRELESS-G 26DBM NETWORK MINI PCI ADAPTER

Model Number : IWAVEPORT WLM54GP26

Prepared for : Compex Systems Pte Ltd
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Maximum permissible exp|osure

1. Applicable standard

System operating under the provision this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissive exposure. In according with 47 CFR FCC Part 2 Subject J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2m normally can be maintained between the user and the device.

(a)Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength(E) (V/m)	Magnetic Field Strength(H) (A/m)	Power density (S) MW/cm^2	Averaging Times $\|E\|^2$,$\|H\|^2$ or S(minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100000			5	6

(b) Limits for General population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength(E) V/m	Magnetic Field Strength(H) A/m	Power density (S) MW/cm2	Averaging Times
0.3-3.0	614	1.63	(100)*	30
3.0-30	824/f	2.18/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100000			1.0	30

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

2 . MPE Calculation Method

$E(V/m)=(30*P*G)^{0.5}/d$ Power Density: $Pd(W/m^2)=E2/377$

P=Peak RF output Power(W)

G=EUT Antenna numeric gain(numeric)

d=Separation distance between radiator and human body(m)

The formula can be changed to

$Pd=(30*P*G)/(377*d^2)$

From the peak EUT RF output power, the minimum mobile separation distance ,d=0.2m, as well as the grant of the used antenna, the RF power density can be obtained.

3 . Calculated Result and limit

For 802.11b& CH1:

Antenna Gain(Numeric)	Peak Output Power (dBm)	Peak Output Power(mW)	Power Density(S) (mW/cm^2)	Limit of Power Density(s) (mW/cm^2)	Test result
2.0	25.12	325	0.1293	1	Compliance

For 802.11b& CH6:

Antenna Gain(Numeric)	Peak Output Power (dBm)	Peak Output Power(mW)	Power Density(S) (mW/cm^2)	Limit of Power Density(s) (mW/cm^2)	Test result
2.0	24.83	305	0.1214	1	Compliance

For 802.11b& CH11:

Antenna Gain(Numeric)	Peak Output Power (dBm)	Peak Output Power(mW)	Power Density(S) (mW/cm^2)	Limit of Power Density(s) (mW/cm^2)	Test result
2.0	25.60	363	0.1444	1	Compliance

For 802.11g& CH1:

Antenna Gain(Numeric)	Peak Output Power (dBm)	Peak Output Power(mW)	Power Density(S) (mW/cm^2)	Limit of Power Density(s) (mW/cm^2)	Test result
2.0	24.98	315	0.1253	1	Compliance

For 802.11g& CH6:

Antenna Gain(Numeric)	Peak Output Power (dBm)	Peak Output Power(mW)	Power Density(S) (mW/cm^2)	Limit of Power Density(s) (mW/cm^2)	Test result
2.0	24.24	266	0.1058	1	Compliance

For 802.11g& CH11:

Antenna Gain(Numeric)	Peak Output Power (dBm)	Peak Output Power(mW)	Power Density(S) (mW/cm^2)	Limit of Power Density(s) (mW/cm^2)	Test result
2.0	25.03	319	0.1269	1	Compliance