

But emission data of fundamental power which is nearest to the Band edge is measured by radiated and conducted.

Therefore we can calculate radiated data of Band edge emission using radiated absolute fundamental power of nearest channel and relative value of Band edge emission against fundamental power of nearest channel.

We think that it is enough to certify the compliance to Band Edge emission using following calculation.

For example

A. Band edge emission of the lower side channel.

We measured the level of the fundamental must be 119.9dBuV/m at 01ch(2401.056MHz), and relative value of Band edge emission is -35.2dB.

Band edge emission level (radiated) = $119.9 - 35.2 = 84.7$ dBuV/m
This frequency is in non restricted band, so the limitation of emission level (peak value) is 20dB below from nearest fundamental level ($119.9 - 20 = 99.9$ dBuV/m)

**Band edge emission is less than limitation. It is complied to the regulation.

B. Band edge emission of the upper side channel.

We measured the level of the fundamental must be 119.2dBuV/m at 91ch(2479.680MHz), and relative value of Band edge emission is -47.2dB.

Band edge emission level (radiated) = $119.2 - 47.2 = 72.0$ dBuV/m
This frequency is in restricted band, so the limitation of emission level is 74 dBuV/m at peak detection.

**Band edge emission is less than limitation. It is complied to the regulation.

If description of PUBLIC NOTICE related to this subject could be still available now, we think band- edge emission level is complied for the regulation.

2- Question: Please clarify the relationship between the EIRP RF Power level used for the SAR

report (158 mW), and the EIRP RF Power level measured in the EMI report (329 mW). Was the SAR performed at maximum RF power?

Answer : the correct power level is 329 mW. We submitted the correct SAR report to the FCC

[KMSC-01-F102(correct SAR_test).PDF].

3- Question: The test report indicates the transmitter has a 7% duty cycle. Please provide the Crest factor

used in the SAR computations.

Answer : The Crest Factor is a parameter which describes the SAR systems ability to measure signals

That have various peak to RMS ratios while still remaining within the system specifications. The crest

factor is not provided for the 3D-EMC system and a verification test was carried out to determine

that the SAR system is responding to the duty cycle waveform as an averaging system. A

uniform field within a TEM cell is used to compare the output of the SAR system of a CW signal

at the frequency of interest, with a pulse modulated carrier using the same pulse width and

repetition rate as the Panasonic phone previously tested at 7%. An HP 437A Peak power meter

is used to set the same peak power in both test conditions. The 3D-EMC system allows for a

real-time monitoring of all amplifier channels. The summed output of the three amplifier

channels from the probe is directly proportional to the E² which is also directly proportional to

SAR according to the equation:

$$SAR = \frac{s E^2}{?}$$

The measured results from the monitor are:

SAR System Output for CW = 57.172

SAR System Output for 7% = 4.041

The ratio of the CW to Duty Cycle Field = 4.041/57.172*100% = 7.07%

The above test verifies that the SAR system is correctly averaging the pulsed carrier and that the

measured SAR values are time based average values.

Sincerely yours,

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