

Chris Harvey

From: Alice Wong [alice_wong@hkstc.com]
Sent: Wednesday, April 11, 2001 4:09 AM
To: charvey@metlabs.com
Cc: EED - Choy, Kitty
Subject: MET# 10738 FCC ID: M8Q8121649 "Ngai Keung Metal & Plastic Manufactory Ltd."

Dear Chris,

MET# 10738
FCC ID: M8Q8121649
Ngai Keung Metal & Plastic Manufactory Ltd.

1) Duty cycle correction during 100 msec:
Each function key sends a different series of characters, but each packet period (50.2msec) never exceeds a series of 4 long (1msec) and 40 short (231usec).
Transmit duty cycle would be considered $(4 \times 1\text{msec}) + (40 \times 231\text{usec})$ per 50.2msec = 26.4%.
Duty cycle correction = $20 \log (0.263) = -11.5\text{dB}$
Figure A to C show the characteristics of the pulse train for one of these functions.
(Please see attached file "pulse")
Thanks.

Best Regards
Alice

> >
> > Ngai Keung FCC ID:M8Q8121649 MET#10738
> >
> > RC Toy Transmitter (DXX) ... 49.86 MHz ... Section 15.235
> >
> > 1. Radiated test data indicates a 10 dB difference between the measured
> > peak and average field strength levels. What type of
> > modulation is employed? If pulsed, measurements with an average
> > detector are not permitted. Instead, the peak level is
> > measured, and then the average level is mathematically calculated, based
> > on the duty cycle. If this is the case, please provide
> > time domain plots so that the duty cycle correction factor may be
> > calculated. If the emission is not pulsed, please explain why
> > there is such a large peak to average ratio, since the plots indicate
> > that the emission is narrower than the measurement bandwidth
> > of 100 kHz specified by the test procedure (ANSI C63.4).
> >



pulse.pdf