From: Pete Krebill

Sent: Wednesday, April 25, 2001 9:39 AM

To: Mike Kuo; Steve Cheng

Cc: Tom Cokenias

Subject: FW: video average or video filtering

----Original Message----

From: Frank Coperich [mailto:FCOPERIC@fcc.gov]

Sent: Wednesday, April 25, 2001 6:48 AM

To: PKrebill@CCSEMC.com Cc: Raymond Laforge

Subject: Re: video average or video filtering

For the purposes of determining compliance with the emissions limit (mask) for Certification of licensed transmitters, use of the video average function on a spectrum analyzer is allowed for signals having a non-constant (modulation) envelope.

Use of a video filter value less that the resolution bandwidth setting is not allowed.

>>> Pete Krebill <PKrebill@CCSEMC.com> 04/19/01 06:23PM >>>
Frank.

Is there a preferred method of averaging. I thought previously you or someone else at FCC sent out an e-mail stating video averaging was preferred. I would appreciate any input you have to answer this question. Thank You, Pete Krebill

Compliance Certification Services

----Original Message----

From: Pete Krebill

Sent: Thursday, April 19, 2001 9:45 AM

To: Mike Kuo

Subject: RE: Mattel, Inc., FCC ID:APB95087-00A2T, AN01T1274

Mike,

FCC previously stated they prefer video averaging to video filtering. Changing the video bandwith to 10Hz is video filtering. On the left side of the average plot I made you will see it says VID AVG 100. That means video averaging was used with 100 sweeps. FCC says use a minimum of 50 sweeps. Let me know if this answers your question adequately. Regards,

Pete Krebill

----Original Message----

From: Mike Kuo

Sent: Wednesday, April 18, 2001 6:19 PM

To: Pete Krebill; Barbara Judge; Christine Vu; Claudia Perez; Steve

Cheng

Subject: RE: Mattel, Inc., FCC ID:APB95087-00A2T, AN01T1274

## Dear Pete:

Since one plot is for peak and the other one is for average. Please explain why the RBW and VBW for both plots are using same setting  $=10\,\mathrm{kHz}$ .

Best Regards

Mike Kuo / TCB Certifier

----Original Message----

From: Pete Krebill

Sent: Wednesday, April 18, 2001 6:15 PM

To: Barbara Judge; Christine Vu; Claudia Perez; Mike Kuo; Steve Cheng

Subject: FW: Mattel, Inc., FCC ID:APB95087-00A2T, AN01T1274

Below are questions from the certification administrator and my responses to those questions. Since we do many submittals for similar projects I want to bring a couple of items to your attention. Two plots are necessary one a peak plot and one an average plot. In the future I will make sure I label them to avoid confusion. Please label them such in the report. Also the question about orientation was answered in the Summary/ Engineering Note of the Transmitter Project Information Sheet I filled out. Please include the information from this section in the future.

Thank You Pete Krebill

----Original Message----

From: Pete Krebill

Sent: Wednesday, April 18, 2001 6:02 PM

To: CERTADM

Subject: RE: Mattel, Inc., FCC ID:APB95087-00A2T, AN01T1274

Certification Administrator,

The two plots are to show compliance with the requirements stated in FCC15.227(a) and FCC15.35(b). The plot with a display line at 80dBuV shows compliance with FCC15.227(a) using video averaging. The plot with a display line at 100dBuV shows compliance with FCC15.35(b) for peak emissions. Both plots were taken in the worst case orientation. Worst case was with the loop antenna vertical at 3.5 meter height and perpendicular to the EUT with the EUT in Y-axis orientation. Y-axis was with the EUT setup so its antenna was vertical.

Regards, Pete Krebill Associate Engineer CCS

----Original Message----

From: certadm [mailto:certadm@ccsemc.com]

Sent: None

To: scheng@ccsemc.com; pkrebill@ccsemc.com

Cc: mkuo@ccsemc.com; cvu@ccsemc.com

Subject: Mattel, Inc., FCC ID:APB95087-00A2T, AN01T1274

Notice\_content

Question: There are two spectrum plots were submitted. One of the plot with d

isplay line setted at 80 dBuV, field strength =64.30@27.147 MHz with RBW=VBW=10 kHz; the other one is with display line setted at 100 dBuV, field strength=76.10 dBuV@27.1462 with RBW=VBW=10 kHz. Please explain why the readings are different and which antenna polarization was positioned for these plots.

Best Regards

Mike Kuo / TCB Certifier The items in

dicated above must be submitted before processing can continue on the a bove referenced application. Failure to provide the requested informati on within 60 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. Also, please note that par tial responses increase processing time and should not be submitted. An y questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender.