

Mike Kuo

From: CCS(KS) - Eric Wong [eric_wong@ccsemc.cn]
Sent: Tuesday, January 04, 2005 2:51 AM
To: Mike Kuo
Cc: 'WangKevin'
Subject: RE: Shenzhen Wanjia Electronics Co.Ltd, FCC ID: SQSSWJ-3301, Assessment NO.: AN04T4396, Notice#1
Importance: High
Attachments: CH1_H_8-18.pdf; CH1_V_8-18.pdf; CH6_H_8-18.pdf; CH6_V_8-18.pdf; CH11_H_8-18.pdf; CH11_V_8-18.pdf; 04E0089-RP_0103.pdf

Hello Mike,

Followings please find my replies in **BROWN**.

Would you please let us get the grant today if there's none or only minor issue to be arisen, since our client is pushing for the grant hardly.

Thank you for your consideration and Happy New Year!!

BR, Eric Wong

From: Mike Kuo [mailto:MKUO@CCSEMC.com]
Sent: Friday, December 31, 2004 6:51 AM
To: CCS(KS) - Eric Wong
Cc: WangKevin
Subject: RE: Shenzhen Wanjia Electronics Co.Ltd, FCC ID: SQSSWJ-3301, Assessment NO.: AN04T4396, Notice#1

Hi Eric :

Question #10: section 5.3 of test report, the NVLAP Lab code (200600-0) is not associated with your test facilities. Please make necessary change.

(Eric: I have made the necessary correction, thanks for your info.)

Question #11: As indicated in the spectrum plots provided, the highest frequency range investigated is 8 GHz. Since this device has fundamental frequency of 2.4 GHz, you should investigate up to 10th harmonics (24 GHz). Please provide spectrum plots from 8 - 24 GHz for L/M/H channel.

(Eric: Please find the spectrum plot for 8~18GHz attached. For the freq. range of 18~24GHz, the plots are unable to be provided since our testing automation software is not capable for the freq above 18GHz, but the emission characteristic are fully investigated by witness and seems no dominant emission to be found)

Question #12: In the test report, the fundamental frequency field strength is indicated as average reading but the spectrum plots

1/5/2005

indicated those readings are peak. Please note : the technical limits listed in section 15.249 is based upon average detector. When the field strength limit is average, there is also a peak limits (average limit + 20 dB) . If the peak reading is complied with average limits, you do not need to submit average reading. On the other hands, if the peak reading is over the average limits, you are required to submit peak reading and average reading. Device must complied with both limits.

(Eric: Actually the testing automation software brings only the PEAK measurement, the AVERAGE measurement is measured by witness and dropped onto the table of the data sheet. For the issue about both limit to be complied, we have already shown both FS on the report but only tighter limits and only 1 margin – by compare with the tighter limit – have been shown. FYI, and please let me know if you have further opinion upon this)

Question #13: By reviewing the spectrum plots, the previous statement that you made that all spurious emissions are all under 20dB of limits is not correct. On the spectrum plots, there are several emission are closed to the limits and some are within restricted band which subject to 15.209 general requirements. Please review your tabular data Vs spectrum plots, report all fundamental emissions, harmonics emissions and spurious emissions .

(Eric: By recalling the attachments of our last correspondence, the tabular shown all the dominant spurious (including harmonic) emission data vs the spectrum plots. Although there're a number of emission recorded within the 20dB of limits but all of them are almost nearly immersed into the background noise-floor, please be considerate upon this and I think this is meaningless for providing such readings.)

Best Regards

Mike Kuo

-----Original Message-----

From: CCS(KS) - Eric Wong [mailto:eric_wong@ccsemc.cn]

Sent: Wednesday, December 29, 2004 10:13 PM

To: Mike Kuo

Cc: 'WangKevin'

Subject: RE: Shenzhen Wanjia Electronics Co.Ltd, FCC ID: SQSSWJ-3301, Assessment NO.: AN04T4396, Notice#1

Dear Mike,

Sorry for I have forgotten to attach the revised test report by my last email. (For the Question7 & 9)
Regarding to the Question 8, please kindly review the spectrum plot about the EUT and proven that there're only the harmonic is dominant.

Thank you and Happy New Year!!

BR, Eric Wong

From: Mike Kuo [mailto:MKUO@CCSEMC.com]

Sent: Thursday, December 30, 2004 10:08 AM

1/5/2005

To: CCS(KS) - Eric Wong

Cc: WangKevin

Subject: RE: Shenzhen Wanjia Electronics Co.Ltd, FCC ID: SQSSWJ-3301, Assessment NO.: AN04T4396, Notice#1

Hi Eric :

Reply to Question #1: O.K.

Reply to Question #2: I will accept the test setup photos this time. However, the quality of photos are still not very good. In the future submission, please focus on the EUT arrangement and cable placement with higher resolution and better lighting.

Reply to Question #3: O.K.

Reply to Question #4: O.K.

Reply to Question #5: O.K.

Reply to Question #6: O.K. In the future submission , please provide description for all support equipments that were used during final compliance tests in the test report.

Reply to Question #7: No revised test report has been submitted. Please submit.

Reply to Question #8: Based upon ANSI C63.4 measurement procedures, if there no spurious emissions can be found within 20dB of limits, you should provide the noise floor level readings. Please provide it.

Reply to Question #9: No revised test report has been submitted. Please submit.

Best Regards

Mike Kuo

-----Original Message-----

From: CCS(KS) - Eric Wong [mailto:eric_wong@ccsemc.cn]

Sent: Wednesday, December 29, 2004 1:51 AM

To: Mike Kuo

Cc: 'WangKevin'; 'CCS(KS) - Eric Wong'

Subject: RE: Shenzhen Wanjia Electronics Co.Ltd, FCC ID: SQSSWJ-3301, Assessment NO.: AN04T4396, Notice#1

Dear Mike,

Please find our replies in [BLUE](#), upon your last comment.

Thank you!!

BR, Eric Wong

-----Original Message-----

From: Mike Kuo [mailto:MKUO@CCSEMC.com]

Sent: Saturday, December 18, 2004 5:12 AM

To: eric_wong@ccsemc.cn

Cc: CCS-'Wang, Kevin ' (E-mail)

Subject: FW: Shenzhen Wanjia Electronics Co.Ltd, FCC ID: SQSSWJ-3301, Assessment NO.: AN04T4396, Notice#1

-----Original Message-----

From: Compliance Certification Services [mailto:MKuo@ccsemc.com]

Sent: Friday, December 17, 2004 12:48 PM

To: Mike Kuo

Subject: Shenzhen Wanjia Electronics Co.Ltd, FCC ID: SQSSWJ-3301, Assessment NO.: AN04T4396, Notice#1

Question #1: Please provide a clear copy of schematic diagram and delete any schematic diagram which is not related to the transmitter.

(Eric: Please find the updated schematics attached, for your reference.)

Question #2: The test setup photos are not clear. If you can not view the pictures clearly on the PDF file, the review can not view it as well. Please provide clear copies of test setup photos to show all the connected cables, support equipments.

(Eric: Please find the updated test setup photos attached, for your reference.)

Question #3: As indicated in the user manual, there are total of 4 user selectable channels. Please provide the operating frequency for each channel.

(Eric: The operating frequency among the channels are: CH1: 2414MHz / CH2: 2432MHz / CH3: 2450MHz / CH4: 2468MHz, for your reference.)

Question #4: Page 3 of user manual indicates there are transmitter with monitor . Please explain what is this device.

(Eric: Please find the updated user manual attached, and that is solely a typo and should be "receiver" instead, for your reference.)

Question #5: Page 1 of user manual, the co-location and Safety information are not applicable to 15.249 device. Please remove these two sections.

(Eric: Please find the updated user manual attached, for your reference.)

Question #6: Section 6.2 of test report did not provide support equipment information which does not agree with the test setup photos. Please provide all support equipment used during the final compliance tests.

(Eric: The device being certified is a "CCD with transmitter" that 's none interconnection with any other supporting equipment. You may find that in the Ext. photo (Pg.2) and the Pg.6 of the manual that only DC power input is employed. The supporting equipments shown in the power-line conducted emission setup photo are connected with the "LCD with receiver" and that 's not the part of this certification, for your reference.)

Question #7: The fundamental field strength for 15.249 device at 2.4GHz is specified as average limits. In the test report, all fundamental field strength limits are indicated as peak limits. Please make necessary correction.

(Eric: Correction is made, please refer to the updated report attached.)

Question #8: In the test report, only harmonic emission above 1 GHz and spurious emission below 1 GHz are provided. Please provide test data to address section 15.249(d) requirements.

(Eric: I have checked all the raw data of the job and found that the spurious emissions among the entire spectrum above 1GHz are already at least minus 20dB with the applicable limit, they have been already considered with the background noise floor. So the data provided are not only harmonic but also the spurious above 1GHz with 20dB-margin, for your reference.)

Question #9: Page 20 of test report, one of LISN is out of calibration. Please address this ISO guide 17025 issue.

(Eric: Please find the updated test report attached and the calibration data is updated, for your reference.)

Best Regards

Mike Kuo

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. Also, please note that partial responses increase processing time and should not be submitted. Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender.