

From: nawata.kunihiko@jp.panasonic.com
Sent: Monday, January 05, 2004 11:35 PM
To: mullenr@us.panasonic.com; sakai-yasuhisa@jqa.jp; SCheng@CCSEMC.com;
hosoda-akio@jqa.jp
Cc: kinoshita-shigeru@jqa.jp; yamanaka-takashi@jqa.jp;
mullenr@optonline.net; SWang@CCSEMC.com; MKUO@CCSEMC.com;
MKaneko@CCSEMC.com
Subject: RE: PCTP-03-F004: Matsushita Electric Industrial C

To: Mr. Cheng/ CCS and Mr. Mullen/ MECA-PSCD cc: Mr. Kinoshita/ JQA
From: Nawata/ PCTP (Panasonic Communications Co., Ltd.)
RE: Matsushita Electric Industrial Co., Ltd., FCC ID:ACJ96NKX-TG2356, AN03T3514
(do not remove subject line when reply)

Dear Mr. Cheng and Mr. Mullen;

Thank you very much for your cooperation.

Today, I have received the reply from JQA lab.

Attached please find our reply letter as following.

Our Reply Letter to CCS

To: Mr. Mullen;
Could you file our reply letter on CCS web site?

Question #1:
We understand this was resolved.

Question #2:
JQA lab answered as shown below.
JQA considered the difference of the Max conducted output powers between
15.247 test (17.8 dBm) and SAR test (17.67 dB) were due to the tolerances
of the measurement equipments.

Answer from JQA:
"The measurement uncertainty of each of test items is shown as follows:
SAR evaluation: +/-2%
15.247 test: +/- 0.6 dB
The measurement value range of the max conducted power measured of test
items is shown as follows:
SAR evaluation : 17.58dBm to 17.76 dBm
15.247 test : 17.2 dBm to 18.4dBm
Therefore, the difference was due to the measurement uncertainty."

Question #3:
Thank you very much for your advice.
We understand the purpose of this measurement, well.
I discussed with JQA in this matter, and as a result of the disucusion,
JQA does not re-measure the z-scan this time because the Max SAR value was
very low level, 0.0928 mW/g (Limit: 1.6 mW/g).
If JQA re-measured the z-scan, it is apparent that the Max SAR value should
also be a very low level from the limitation.
JQA wants to expand z-scan distance to cover 16 cm (or as far as possible)
from the bottom surface in future submission.

If you should have any question/comment, please feel free to contact us.

Thank you very much for your attention and time in this matter.

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

From: "Steve Cheng" <SCheng@CCSEMC.com>
To: "'?? ??" <nawata.kunihiko@jp.panasonic.com>, <mullenr@us.panasonic.com>, <sakai-yasuhisa@jqa.jp>
Cc: <kinoshita-shigeru@jqa.jp>, <yamanaka-takashi@jqa.jp>, <mullenr@optonline.net>, "Scott Wang" <SWang@CCSEMC.com>, "Mike Kuo" <MKUO@CCSEMC.com>, "Mika Kaneko" <MKaneko@CCSEMC.com>
Date: Mon, 05 Jan 2004 18:17:09 -0800

Hi Nawata-san,

Happy new year, and wish you all have a very successful coming year. Regarding to question #3, JQA does tested the SAR with 15 cm simulation liquid filled. The problem is they did not scan Z axis long enough to see the trace settle. Normally, SAR lab will scan Z axis in between 10 to 16cm range to demonstrate no unexpected response detected. Although FCC does not clearly document a specific distance to scan, but experience has tell us that they are looking for a complete settled trace or scan has exceed the liquid/air boundary (at 15cm high). I strongly recommend that JQA to re-conduct the Z scan if possible. Thanks for your attention.

Best regards,
Steve

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

From: nawata.kunihiko@jp.panasonic.com [mailto:nawata.kunihiko@jp.panasonic.com]
Sent: Sunday, January 04, 2004 11:04 PM
To: mullenr@us.panasonic.com; SCheng@CCSEMC.com; sakai-yasuhisa@jqa.jp
Cc: kinoshita-shigeru@jqa.jp; yamanaka-takashi@jqa.jp; mullenr@optonline.net; SWang@CCSEMC.com; MKUO@CCSEMC.com; MKaneko@CCSEMC.com
Subject: RE: PCTP-03-F004: Matsushita Electric Industrial C

To: Mr. Cheng/ CCS Mr. Mullen/ MECA-PSCD
From: Nawata/ PCTP (Panasonic Communications, Telecom)
RE: FCC ID:ACJ96NKX-TG2356, AN03T3514

Dear Mr. Cheng and Mr. Mullen;

Today, I returned our office and found this E-mail.
Thank you very much.

Question #1:

I understand this matter was resolved.

Question #2:

I contacted JQA lab.

Unfortunately, today JQA had their New Year celemony only and did not work in office/lab.

I had a short discussion on this matter, and JQA advised they could provide with the answer tomorrow.

Question #3:

As for this job, could you confirm if this matter is OK as it is, or not? Namely, is it acceptable JQA should extend z-scan distance to cover 16cm from the bottom surface IN FUTURE submission?

Regarding "z-scan distance to cover 16cm from the bottom surface", could you advise this issue in details?

Because I think OET Bulletin 65 requires the equivalent tissue medium should

fill the depth of 15cm from the bottom surface.

Thank you very much.

----- ORIGINAL MESSAGE -----

From: "Steve Cheng" <SCheng@CCSEMC.com>

To: "'Mullen, Richard'" <mullenr@us.panasonic.com>

Cc: "?? ??" <PAN42926@pios.kme.mei.co.jp>, <kinoshita-shigeru@jqa.jp>, <yamanaka-takashi@jqa.jp>,

"Mullen, Richard C." <mullenr@optonline.net>, "Scott Wang" <SWang@CCSEMC.com>,

"Mike Kuo" <MKUO@CCSEMC.com>, "Mika Kaneko" <MKaneko@CCSEMC.com>

Date: Mon, 29 Dec 2003 21:38:17 -0800

Dear Richard-san,

Re your response dated 12/26/2003,

Question #1: Based upon the theory of operation description, this frequency hopping is TDMA modulation with 8 time slots. In any given time, only four time slots are used for transmitting. Per the SAR test report, crest factor of 1 with 100% duty cycle was used during the SAR tests. Please confirm the handset and base unit were transmitting 100% duty cycle and please provide procedures to describe how this was done.

<CCS> OK, you have re-evaluated the SAR reading with the actual duty-cycle of 1:11.3

Question #2: The max. conducted output power measured before SAR evaluation is 17.67dBm which is less than max. conducted output power (17.8dBm)measured during 15.247 tests. Please explain the differences. Per FCC review instruction, " Conducted power in SAR report should be greater than or equal to what's in EMC report, but not exceeding tune-up/tolerance". "Scaling up or down 5% is allowed". Please address this issue.

<CCS> Theoretically, smaller the measurement bandwidth will lead to lower reading, but our understanding is that average power meter is considered to be a wideband measurement equipment and usually measured higher reading than spectrum analyzer. Please clarify if broadband average meter was used on EMC test or it is due to the measurement uncertainty between two different equipments.

Question #3: Please provide SAR Vs Z axis plots for highest SAR reading during Handset (head and body) and Base (body worn)

<CCS> The purpose of Z plot is to reveal if measurement environment is free from ambient pickup, reflection or proper liquid level...etc. Please extend z-scan distance to cover 16cm from the bottom surface in future submission.

Best regards,
Steve Cheng

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

From: Mullen, Richard [mailto:mullenr@us.panasonic.com]
Sent: Monday, December 29, 2003 10:13 AM
To: SWang@CCSEMC.com; MKaneko@CCSEMC.com; SCheng@CCSEMC.com
Cc: ?? ??; kinoshita-shigeru@jqa.jp; yamanaka-takashi@jqa.jp; Mullen, Richard C.
Subject: PCTP-03-F004: Matsushita Electric Industrial Co., Ltd., FCC ID:ACJ96NKX-TG2356 / AN03T3514

12/29/03

To CCS and Other Concerned Parties,

Please be advised on December 26th the following 4 files were uploaded into CCS web site:

Reply Letter to CCS
Revised SAR Report
Revised Appendix 2
Additional Appendix 5

Please advise if you have any questions or comments - thanks.

Best regards,
Richard Mullen / MECA-PSCD
Matsushita / Panasonic

From: PAN42926@pios.kme.mei.co.jp [mailto:PAN42926@pios.kme.mei.co.jp]
Sent: Friday, December 26, 2003 2:40 AM
To: Mullen, Richard; kinoshita-shigeru@jqa.jp; yamanaka-takashi@jqa.jp; SWang@CCSEMC.com
Cc: MKaneko@CCSEMC.com; SCheng@CCSEMC.com
Subject: PCTP-03-F004: Matsushita Electric Industrial Co., Ltd., FCC ID:ACJ96NKX-TG2356 / AN03T3514

To: Mr. Wang/ CCS
From: Nawata/ PCTP (Panasonic Communications, Telecom)
RE: FCC ID:ACJ96NKX-TG2356, AN03T3514

Dear Mr. Wang;

All Noted.
Thank you very much for your advice.

Today, I send our reply to our Mr. Mullen/ MECA-PSCD.
He will file the answer to CCS web site.

JQA also closes after 12/28 and begins on 1/5/2004.

If CCS should have any further question/comment, to save time CCS can send it/them to JQA lab too.

In that case, please send the same E-mail to me and our Mr. Mullen.

The JQA person is;

Mr. S. Kinoshita/ JQA
(E-mail kinoshita-shigeru@jqa.jp)

Thank you very much.

----- ORIGINAL MESSAGE -----

From: "Scott Wang" <SWang@CCSEMC.com>
To: "'?'c□@-M?'" <nawata.kunihiko@jp.panasonic.com>, <mullenr@us.panasonic.com>, <kinoshita-shigeru@jqa.jp>, <yamanaka-takashi@jqa.jp>
Cc: "Mika Kaneko" <MKaneko@CCSEMC.com>, "Steve Cheng" <SCheng@CCSEMC.com>
Date: Thu, 25 Dec 2003 16:22:50 -0800

Hi:

Our holiday leave from 12/24- 28 and 1/1-2. Does JQA close after 1/28? As long as we can contact JQA, it will be fine. Have a good holiday to you. The reviewer, Mike Kuo will be out of town until 1/2, the other reviewer, Steve Cheng will continue to finish the application for you by your deadline. Please call ext. 119 to him, if you need to contact him.

Best Regards,

Scott Wang
Compliance Certification Services

561 F Monterey Road, Morgan Hill
CA 95037
Tel: 408-463-0885 x 116
Fax: 408-463-0888
Email: Swang@ccsemc.com
WWW.CCSEMC.COM

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

From: nawata.kunihiko@jp.panasonic.com [mailto:nawata.kunihiko@jp.panasonic.com]
Sent: Wednesday, December 24, 2003 10:32 PM
To: SWang@CCSEMC.com; mullenr@us.panasonic.com; kinoshita-shigeru@jqa.jp; yamanaka-takashi@jqa.jp
Cc: MKaneko@CCSEMC.com
Subject: Re:FW: Matsushita Electric Industrial Co., Ltd., F

To: Mr. Wang/ CCS
From: Nawata/ PCTP (Panasonic Communications, Telecom)

RE: FCC ID:ACJ96NKX-TG2356, AN03T3514

Dear Mr. Wang;

I had received three questions from Mr. Kuo on SAR.

JQA is now preparing the answer, and we will answer our reply by December 26.

Because our company closes from 12/27/2003 to 1/4/2004.

Our reply will be filed via our Mr. Mullen/ MECA-PSCD.

Our dead-line is around MID/JAN next year.

Therefore, I want to get the approval in the week of January 5.

Thank you very much.

----- ORIGINAL MESSAGE -----

From: "Scott Wang" <SWang@CCSEMC.com>
To: "'?????'" <nawata.kunihiko@jp.panasonic.com>
Cc: "Mika Kaneko" <MKaneko@CCSEMC.com>
Date: Mon, 22 Dec 2003 16:13:18 -0800

Hi: Mr. Nawata-san:

It was taken more hours than our expectation to review this application on the last Friday, sorry that we didn't make it on time.

Please have JQA to respond as soon as possible and let us know your deadline, we will make it for you due to Holiday leave in the coming two weeks.

Thanks for your patience.

Best Regards,

Scott Wang
Compliance Certification Services

561 F Monterey Road, Morgan Hill
CA 95037
Tel: 408-463-0885 x 116
Fax: 408-463-0888
Email: Swang@ccsemc.com
WWW.CCSEMC.COM

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

From: Mike Kuo
Sent: Monday, December 22, 2003 3:48 PM
To: 'Mullen, Richard'
Cc: PCTP / Nawata, Kunihiko
Subject: FW: Matsushita Electric Industrial Co., Ltd., FCC

ID:ACJ96NKX-TG2356, AN03T3514 (do not remove subject line when reply)

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

From: CERTADM

Sent: Monday, December 22, 2003 3:44 PM

To: Mike Kuo

Subject: Matsushita Electric Industrial Co., Ltd., FCC ID:ACJ96NKX-TG2356, AN03T3514

Notice_content

SAR portion:

Question #1: Based upon the theory of operation description, this frequency hopping is TDMA modulation with 8 time slots. In any given time, only four time slots are used for transmitting. Per the SAR test report, crest factor of 1 with 100% duty cycle was used during the SAR tests. Please confirm the handset and base unit were transmitting 100% duty cycle and please provide procedures to describe how this was done.

Question #2: The max. conducted output power measured before SAR evaluation is 17.67dBm which is less than max. conducted output power (17.8dBm)measured during 15.247 tests. Please explain the differences. Per FCC review instruction," Conducted power in SAR report should be greater than or equal to what's in EMC report, but not exceeding tune-up/tolerance". "Scaling up or down 5% is allowed". Please address this issue.

Question #3: Please provide SAR Vs Z axis plots for highest SAR reading during Handset (head and body) and Base (body worn)

Administrative portion :

No issue.

15.247 EMC portion :

No issue.

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.