

To: Federal Communications Commission
7435 Oakland Mills Road
Columbia, Maryland, 21046

From: ATCB, On behalf of:
OQO
583 Shotwell Street
San Francisco, CA

Regarding: **SHD-A5YWFS**

24 April 2007

Gentlemen,

There were several inquiries recently regarding our recent FCC certification on FCC ID SHD-A5YWFS. This device is a composite device and as such there were multiple grants issued, thus there were inquires sent for each grant of

Correspondence Reference Number:	37349
731 Confirmation Number:	TC494595
Date of Original Email:	03/30/2007

Correspondence Reference Number:	37351
731 Confirmation Number:	TC302240
Date of Original Email:	03/30/2007

authorization. In order to simplify the response, we have combined all of the inquiries into this on reply document that will be submitted in response to each separate request for information. I hope that this does not cause to much confusion.

The table to the right outlines the different Correspondence reference numbers. These are also referenced below with each inquiry.

On Behalf of OQO,

Best Regards,



David Waitt
ATCB

(C)

37349 #3

37351 #3

3) Internal photos are insufficient - please revise to show chassis assy, transmitter and antenna position(s), all boards and components, etc

Additional internal / external photo exhibit has been uploaded

(E)

37349 #3

37351 #2

5) Please submit final-product complete operating instructions [2.1033(b)(3), 2.1033(c)(3)]

The final version of the user manual has been uploaded with this reply

(F)

37351 #5

1) SAR report contains data intended to represent 5250-5350 MHz & 5470-5725 MHz operations - we did not review it for this audit, but note this data may not be in accordance with default test channels required by FCC-TCB 802.11abg and 3-6 GHz SAR procedures. More importantly, this grant does not appear intended to include these 5250-5350 & 5470-5725 bands - please submit entire replacement SAR report omitting these bands.

The unit was tested for SAR on all bands, however DFS was not operational on the bands that require DFS. Anticipating DFS functionality in the near future, OQO opted to verify SAR performance on these bands. That data was included in the report.

It was not deemed necessary at the time to remove the data from the SAR report since the FCC Grant of authorization did not indicate operation for these frequencies was allowed.

Per FCC request the SAR report has been revised and re-submitted.

(G)

37349 #6

37351 #6

2) SAR report does not appear to be in accordance with FCC-TCB 802.11abg procedures, ie channels tested, etc. - please explain and submit appropriate replacement SAR report.

SAR testing was performed on this device from 30 Aug to 6 Sept 2006. At that time the generally accepted policy was to verify SAR performance on the L-M-H channel of each operating band, including 5 GHz. Typically the first channel tested was the middle channel, if the SAR result was 3dB below the limit, it was

not necessary to test on the low and high channel. This was the case for 2.4 GHz as well as the 5 GHz bands.

The policy regarding test channels for 802.11A was revised by the commission and is outlined in the document "SAR measurement procedures for 802.11 a/b/g transmitters" released by the FCC October 2006, approximately 1 month after the device had been tested for SAR.

It is noted that preliminary SAR measurement procedure guidance was released in May of 2006, however this guidance document addressed preliminary SAR procedure for 3G phones, not 802.11 devices. Thus, at the time SAR was evaluated, the SAR procedure at the time was used.

The reason for the delay between the SAR testing (Sep 2006) and the certification of the product (Dec 2006) is because, at the time, it was anticipated that TCBS would be allowed to issue grants for devices requiring SAR above 3 GHz as of the TCB meeting in October 2006. This was deemed the fastest route to product certification.

It is noteworthy that the 802.11 A channels tested for SAR yielded a maximum SAR value of .723 w/kg (at 5290MHz). Additionally, the maximum measured SAR in the certified bands of operation this is .69 W/kg (at 5210 MHz). This demonstrates greater than a 3dB margin below the allowed SAR limit.

(H)

37349 #7

37351 #7

7) Please move 63-page portion of SAR report out of test-setup e-filing folder and into RF-exposure folder where it belongs

REPLY: The exhibit will be placed in the RF Exposure folder.

(I)

37349 #1

37351 #1

1) DTS part of composite filing has exhibits marked confidential, but confidentiality request letter not found - please explain and revise

The confidentiality request was inadvertently omitted for this portion of the filing while being uploaded for the other parts of the a filing. The Confidentiality request has been uploaded for the DTS part of the filing.

(J)

37349 #4

37351 #4

4) For NII part of composite, please submit separate exhibit(s) showing only EMC test setup photo(s) into correct e-filing folder

UNII EMC test setup photos will be uploaded accordingly. The setup is the same as was uploaded for the ISM portion of the filing.

**FOR REFERENCE ONLY
THE ORIGINAL EMAILS ARE COPIED BELOW**

Correspondence Reference Number: 37349
731 Confirmation Number: TC494595
Date of Original Email: 03/30/2007

Subject: audit

TCB to coordinate response:

This two-part composite device application filing is not in accordance with 47 CFR 2.962(f)(1). Please address below items, or submit letter from grantee requesting application dismissal.

1) DTS part of composite filing has exhibits marked confidential, but confidentiality request letter not found - please explain and revise

2) Please submit final-product complete operating instructions [2.1033(b)(3), 2.1033(c)(3)]

3) Internal photos are insufficient - please revise to show chassis assy, position(s) of transmitter(s) and antenna(s), all boards and components, etc

4) For NII part of composite, please submit separate exhibit(s) showing only EMC test setup photo(s) into correct e-filing folder

5) SAR report contains data intended to represent 5250-5350 MHz & 5470-5725 MHz operations - we did not review it for this audit, but note this data may not be in accordance with default test channels required by FCC-TCB 802.11abg and 3-6 GHz SAR procedures. More importantly, this grant does not appear intended to include these 5250-5350 & 5470-5725 bands - please submit entire replacement SAR report omitting these bands.

6) SAR report does not appear to be in accordance with FCC-TCB 802.11abg procedures, ie channels tested, etc. - please explain and submit appropriate replacement SAR report.

7) Please move 63-page portion of SAR report out of test-setup e-filing folder and into RF-exposure folder where it belongs

Correspondence Reference Number: 37351
731 Confirmation Number: TC302240

Date of Original Email: 03/30/2007

Subject: audit

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