

Hi, I have some preliminary comments/questions on the STB DRAFT 2 Ver. 4.1 and the DOE test method.

1) Eligibility Criteria, Section 3.1.1 reads as follows which is copied from what is normally used for meter resolution.

3.1.1 All measured and calculated power values shall be rounded as follows:

i. 0.01 W or better for power measurements of 10 W or less;

ii. 0.1 W or better for power measurements of greater than 10 W and up to 100 W; and

iii. 1 watt or better for power measurements of greater than 100 W.

The term “or better” implies that it can be rounded to an even less significant digit. Is this the intent ? I don't see the logic in requiring it to be rounded to a particular digit and then implying that it can be rounded to an even less significant digit. I suggest that the words “or better” be deleted.

2) In Eligibility Criteria Section 3.2.2, the term Maintenance Activity is used. I believe a definition specifically for Maintenance Activity should be added to Section 1 Definitions to clarify.

3) In Eligibility Criteria Section 4.6.4, first sentence reads:

The following instructions describe the measurement of Sleep Mode for Displayless Video Gateways for the purposes of calculating AEC.

I believe it should say On Mode instead of Sleep Mode.

4) DOE NOPR for STB: Section 4.6.2 first sentence reads:

Broadband Service. If the STB includes an HNI, and the HNI shall be connected to broadband service for operation of a principal STB function, it shall be tested while connected to a broadband network.

I believe it should say “must” instead of “shall”.

5) DOE NOPR for STB: Section 5.2.1, Table 1: In the table there is an asterisk after “2 or 3” and after “1 or 2”. Where is the explanatory note associated with the asterisks ?

From: Joe Murru <joe.murru@csagroup.org>
Sent: Friday, July 12, 2013 2:02 PM
To: Malinowski, Matt
Cc: stbs@energystar.gov
Subject: ENERGY STAR STB Draft 2 Ver. 4.1

Hi Matt , Hope you're doing well and enjoying the summer !

I had a few questions on the ENERGY STAR STB Draft 2 Ver. 4.1 when you get a minute.

1) The Draft CEA-2043, Set-top Box (STB) power measurement, Rev. Apr-2013 is referred to in the ENERGY STAR STB Draft 2 Ver. 4.1.

I can't find any such CEA document and I assume it is now out of its draft state and published as **CEA Standard Set-top Box (STB) Power Measurement CEA-2043 June 2013**, and that this June 2013 published standard is the one to use for ENERGY STAR STB Draft 2 Ver. 4.1, is that correct ?

2) DOE test method section 5.6.8.2 reads:

If the STB supports multi-streaming, operate the STB in the multi-stream configuration (section 5.5.2 of this appendix) for at least 5 minutes. If the STB does not support multi-streaming, operate the STB in the on (watch TV) configuration (section 5.5.2 of this appendix) for at least 5 minutes.

I believe the first sentence should refer to section 5.5.3 for multi-stream instead of 5.5.2.

3) DOE test method sections read:

-5.6. Sleep Mode Power Measurement.

-5.6.1. Only run the test for each mode if the STB supports this functionality, as defined in section 2.25.2. If the STB cannot be placed in sleep mode as defined in section 2.25.2 using a remote control, then this test shall be skipped.

-5.6.7. Manual Sleep Test

-5.6.7.1: If the STB does not support sleep mode, then set P_{SLEEP_MANUAL} equal to P_{WATCH} .

-5.6.8 Auto Power Down (APD) Test

-5.6.8.1: Perform this test only if the STB supports auto power down as defined in section 2.2 of this appendix.

I interpret this to mean that :

a) if the STB cannot be placed in Sleep mode with its remote control then both the Manual Sleep Test of section 5.6.7 and the APD test of 5.6.8 are skipped and the value for P_{WATCH} is used for P_{SLEEP_MANUAL} and P_{SLEEP_APD} in the AEC formula, is that correct ?

b) if the STB does not support sleep mode, then the value for P_{WATCH} is used for P_{SLEEP_APD} in the AEC formula, is that correct ?

c) if the STB does not support APD then the value for P_{WATCH} is used for P_{SLEEP_APD} in the AEC formula, is that correct ?

Thanks

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From: Joe Murru <joe.murru@csagroup.org>
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Subject: STB Draft 2 Ver. 4.1

Hi, I have some more STB questions. Please feel free to post them to the ENERGY STAR web site.

1) Eligibility Criteria Section 4.2: Number of units required for testing

a) For a STB (**not** Displayless Video Gateway): Section 4.2.1 i. can be interpreted two ways but can you confirm that the following is correct:

The sampling method of 10 CFR, Part 429, Subpart B, 429.55 is applied for all required tests except that only one UUT in the sample may be tested to check that the model is eligible for the client only incentive or the deep sleep incentive, e.g. there were 3 samples required to be tested to satisfy the CFR sampling method for all the tests except only one of the three samples was tested to check eligibility for the client only incentive and the deep sleep incentive and this is acceptable

b) For a Displayless Video Gateways: Section 4.2.1 ii. : All testing including testing to check that the model is eligible for the deep sleep incentive can be done on one UUT sample only and the sampling method of 10 CFR, Part 429, Subpart B, 429.55 is not applicable. Is this correct ?

c) For a multi-room STB: Section 4.2.1 iii. : The sampling method of 10 CFR, Part 429, Subpart B, 429.55 is applied for all tests except that only one UUT in the sample may be tested to check that the model is eligible for the client only incentive, e.g. there were 3 samples required to be tested to satisfy the CFR sampling method for all the tests except only one of the three samples was tested to check eligibility for the client only incentive and this is acceptable. Is this correct?

d) For STBs and Displayless Video Gateways: Section 4.2.1 iv. : The sampling method of 10 CFR, Part 429, Subpart B, 429.55 is not required to be applied for tests in Deep Sleep State. Is this correct?

2) Eligibility Criteria Section 4.4: UUT Connection Precedence when Using Draft CEA-2043 for Displayless Gateway, Additional Multi-room STB Testing:

Is this section applicable to :

- All tests for Displayless Video Gateways?
- Client Only incentive testing for Multi-room STBs?
- Deep Sleep incentive testing for STBs?
- Deep Sleep incentive testing for Displayless Video Gateways?

Thanks
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From: Joe Murru <joe.murru@csagroup.org>
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Subject: Draft 2 Ver. 4.1

Hi, Questions for you.

1)DOE Test Procedure for On (Watch TV SD) test, sections 5.5.2.1.2 and 5.5.2.1.3 reads :

"5.5.2.1.2. Of all the connections to the STB, only one stream shall be enabled and shall stream to a display device. No additional streams shall be sent to other connected display devices and/or clients.

5.5.2.1.3. If supported, select an SD channel and view on the connected display device. For STBs using a content provider that does not support channels, select an appropriate SD test stream and view the content as indicated."

My understanding is that if a STB has a DVR the SD content has to be recorded on the DVR and streamed to the display device for this test. Is this correct? Is this only applicable when there is a connected client ?

Thanks
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