Comments in RED from Nick

Comments in GREEN from Ryan

Hello Ryan,

I am the engineer from EnerNOC assigned to the review of the recently approved RTF work product “Residential LEDs”. Since this is a rather large workbook and I had already accumulated a large amount of questions, comments, and requests for further information after reviewing the back end data (sheets after RBSA Supporting Tables), I figured that I would split the question load in two. Would really appreciate your input on these issues:

-          In the "RBSA" sheet column U, I'm presuming that the conversion from days to years should use 365.25 instead of the 362.25 that's in there? Yes

-          Please provide the original RBSA data for the “RBSA” sheet.  That is the original data, simply exported from the database to link tables together. I think you can mark this as a limit of review in that you didn’t review the database source data.

-          In the "RBSA Supporting Tables" sheet, what is the source for cells A60:B60? Incandescent and CFL wattages are not given on the "[designrecycleinc.com](http://designrecycleinc.com/)" source for 250 lumens. I’m not sure exactly. I think it must have been a search online to find that products in this lumen bin and assign an equivalent wattage. Now that I look again online however, it seems that 5 W is more of the average for a 250 lumen equivalent CFL. I am not sure this makes a large difference since the count of 25w CFL’s is small in the overall sample and doesn’t change savings at all when changing the wattage equivalent from 6.5 to 5.

-          What source did you use to determine the EISA exemption status for the RBSA lamp types? Was it specifically 10 CFR 430.2 or some other regulation/exemption documents? 10 CFR 430.2 as well as DOE’s website covering [Incandescent Reflector Lamps](http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/58) and [General Service Incandescent Lamps](http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/61)

-          Cannot find the exact matches for the Halogen products used to establish the lumen/watt correlation in the Sylvania product catalog. The link in the file points to an expired session; I was able to find the catalog on the Sylvania website but unsure of which halogen lights were used by the RTF. Please see attached Sylvania catalog, page 51 for the halogen bulbs used to derive average lm/watt.

-          Could you please point me to where you got the lumen/watt values in Cells D79:D82 (RBSA Supporting Tables)? They are not present in the EERE Appliance Standards website or in the accompanying TSD, nor are they reachable arithmetically from min and max lumens (or averages) divided by the max wattage. I believe these are the average lumens per watt of bulbs that are commonly found within each lumen range. Although the EISA standard covers a lumen range, we know that the most common wattages within those ranges are going to be 100W, 75W, 60W, and 40W. So we use the average lumen output from each of those products. For the 1490-2600 lumen range for example, it is most commonly a 100W bulb that, according to the designrecycle site, puts out 1690 lumens. The equivalent lm/watt is therefore 16.9. Likewise for the other lumen ranges.

-          Just as a point of interest, in 2014 you would add an extra if(and) statement to the EISA exemptions (cells F124 and down in RBSA Supporting Tables), right? Correct.

-          What is the source of the Table 77 in the "RBSA Supporting Tables" sheet? It is from the RBSA report, which can be found[here](http://neea.org/docs/reports/residential-building-stock-assessment-single-family-characteristics-and-energy-use.pdf?sfvrsn=8) on page 70.

-          Please provide the reports/full references for DOE 2010 and the KEMA 2010 Upstream Lighting Program Report documents used to procure HOU numbers in "HOU" sheet. See [KEMA study here](http://www.energydataweb.com/cpucFiles/18/FinalUpstreamLightingEvaluationReport_2.pdf) Table 85, p145. and the [DOE report here](http://apps1.eere.energy.gov/buildings/publications/pdfs/ssl/lmc_vol1_final.pdf) Table 5-9, p 40.



-          Is the data in the "Sheet2" sheet necessary for the pivot table in "Efficacy History"? Can't one just add the year column to data in the "LED Product List"? Just seems that this sheet is somewhat superfluous to the analysis.

Correct

-          In the "Base Cost" sheet, there is a note in cells C27:E29 that states "ask RTF if we should take average to treat all lamp types equal- look into costs in other workbook". Has this issue been resolved?

RTF did not take up this issue at the meeting. So the current approach, which is to use specific costs when we have them, should remain.

-          Was the Incandescent/Halogen Lamp Shelf Cost Survey conducted by the RTF, or an outside party? If it was an outside party, please provide the source.

I’m not sure – I’ll ask Nick

-          If you have a copy of the original 2013 PSE and 2012  LED Cost datasets, please be so kind as to send them over.

2013 is attached. I’ll ask Nick about 2012.

-          What is the reason for highlighting data in red in the 2012 dataset in "LED Cost" Sheet? (e.g. cells BI58:CP58)

I don’t know. Given that the 2012 data is no longer used in the analysis, I think that the formatting could be removed.

-          If the "Additional Parameters" sheet has a 2013$ to 2006$ deflator in Cell F74, should we not use that instead of the 2012$ deflator in the "Base Cost" sheet cells O7:O60 as well as D38:E55? The 2013 deflator was used in the "LED Cost" sheet for 2013 costs (columns AF  and DD).

The CFL cost data is from 2012, so the 2012$ deflator should be used for that. But the Inc. and Halogen cost data is from 2013, so the 2013$ deflator should be used for those lamp types.

-          The current sunset date is March 1st. Shouldn't the sunset date be the end of a month instead of the first day of it, as per QC guidelines? Is February 28, 2014 preferable to March 31st, instead of March 1?

Correct. February 28 would make the most sense, because it’s only one day off from what was proposed to the RTF.

Thank you very much and have a great long weekend!