

CFL Color Roundtable Meeting



Summary of Meeting Agenda & Discussions

By

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CFL Color Roundtable Meeting



Increasing Market Acceptance of CFLs

- The Lighting Research Center, in cooperation with the ENERGY STAR® program under the U.S. Environmental Protection Agency and the U.S. Department of Energy, investigated methods of increasing market acceptance of screw-base compact fluorescent lamps (CFLs).

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Scope

- Perform limited laboratory measurements
 - Color
 - Warm-up time
- Verify the ranking of the issues/barriers associated with consumer acceptance of CFLs
- Suggest actions to overcome the identified issues.

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Laboratory Measurements

CFLs Evaluations

Warm-up
time

Color

Chromaticity
Coordinates

Correlated Color
Temperature (CCT)

Focus Groups

In-home
observations

In-focus group
facility discussions

Survey of
observations

Consumer
discussions

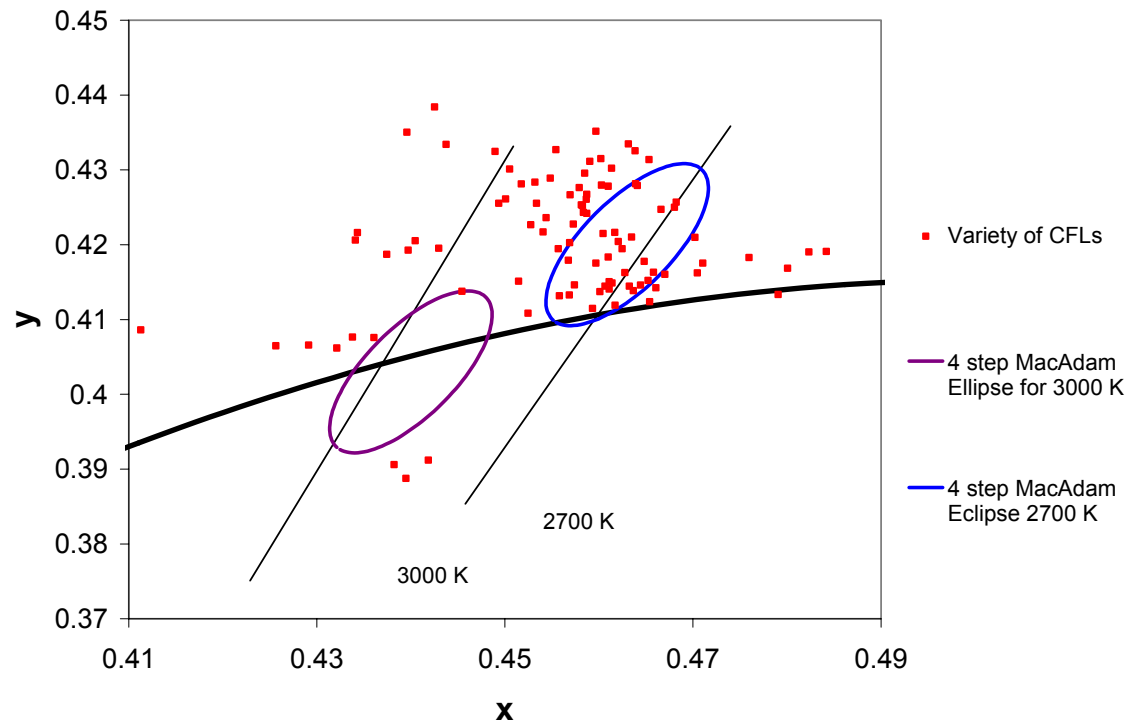
Table lamps
demonstration

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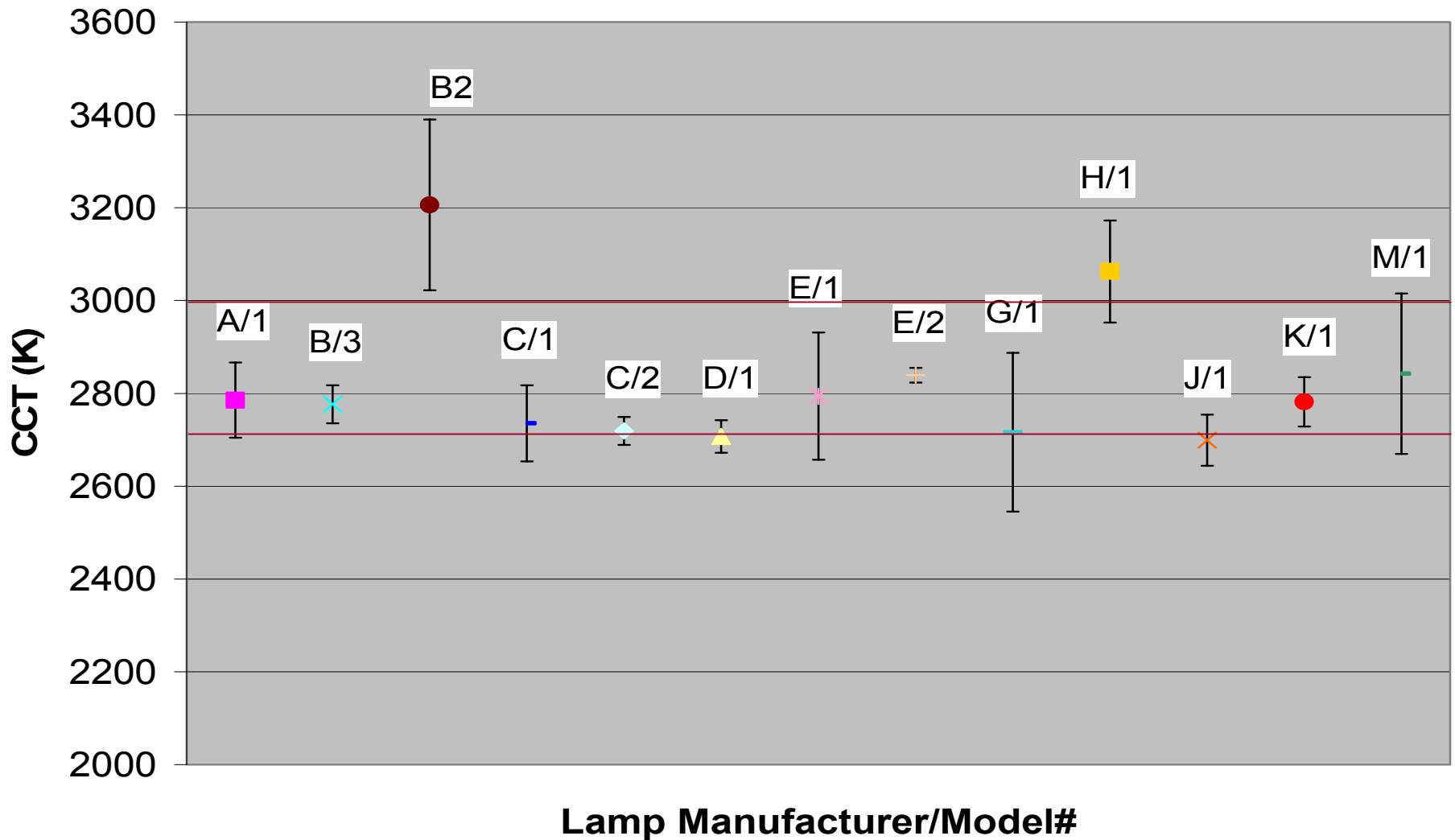


Results

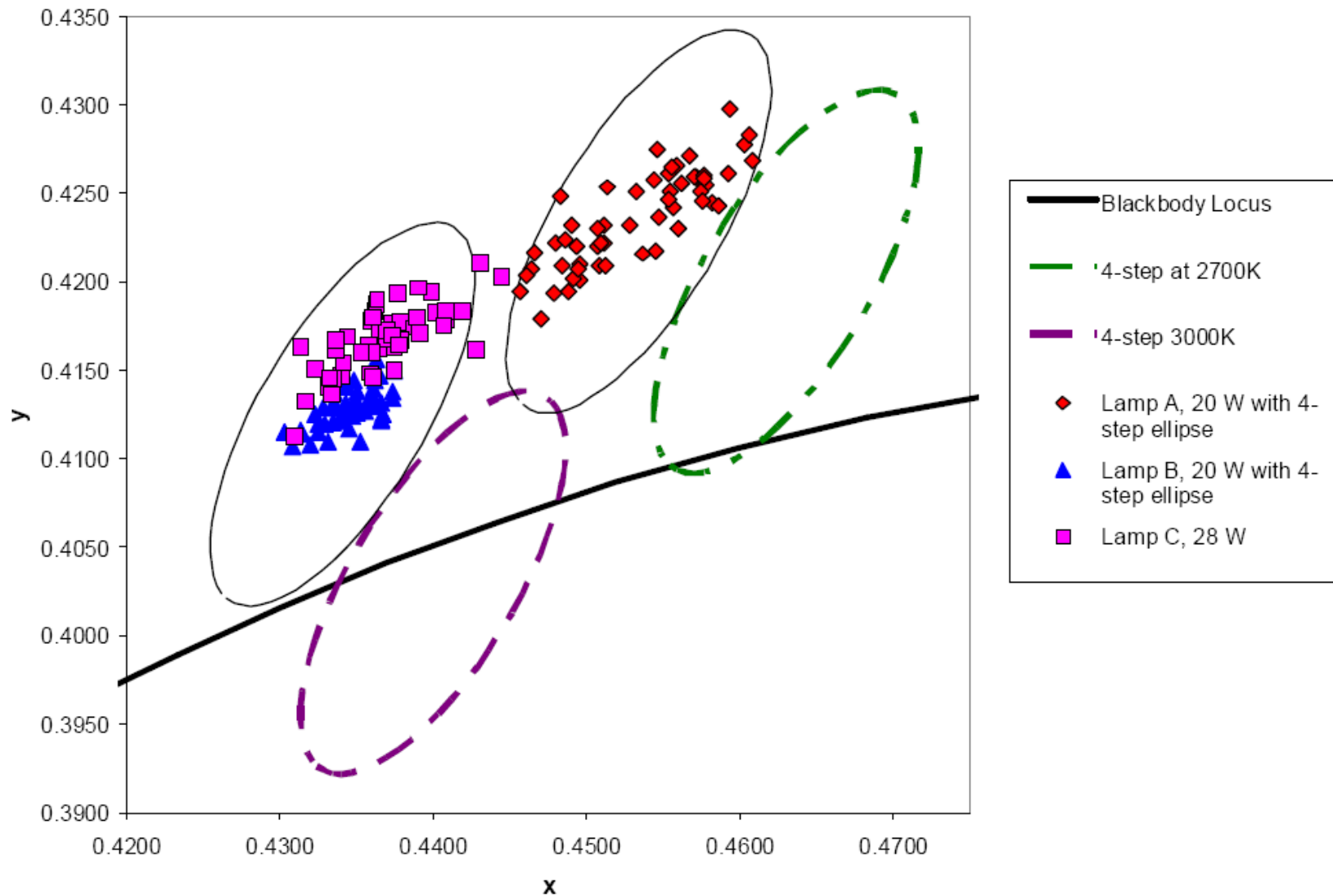
- Wide variation in CCT and chromaticity coordinates
 - Between manufacturers
 - Within manufacturers
- CCT is not an unambiguous description of color



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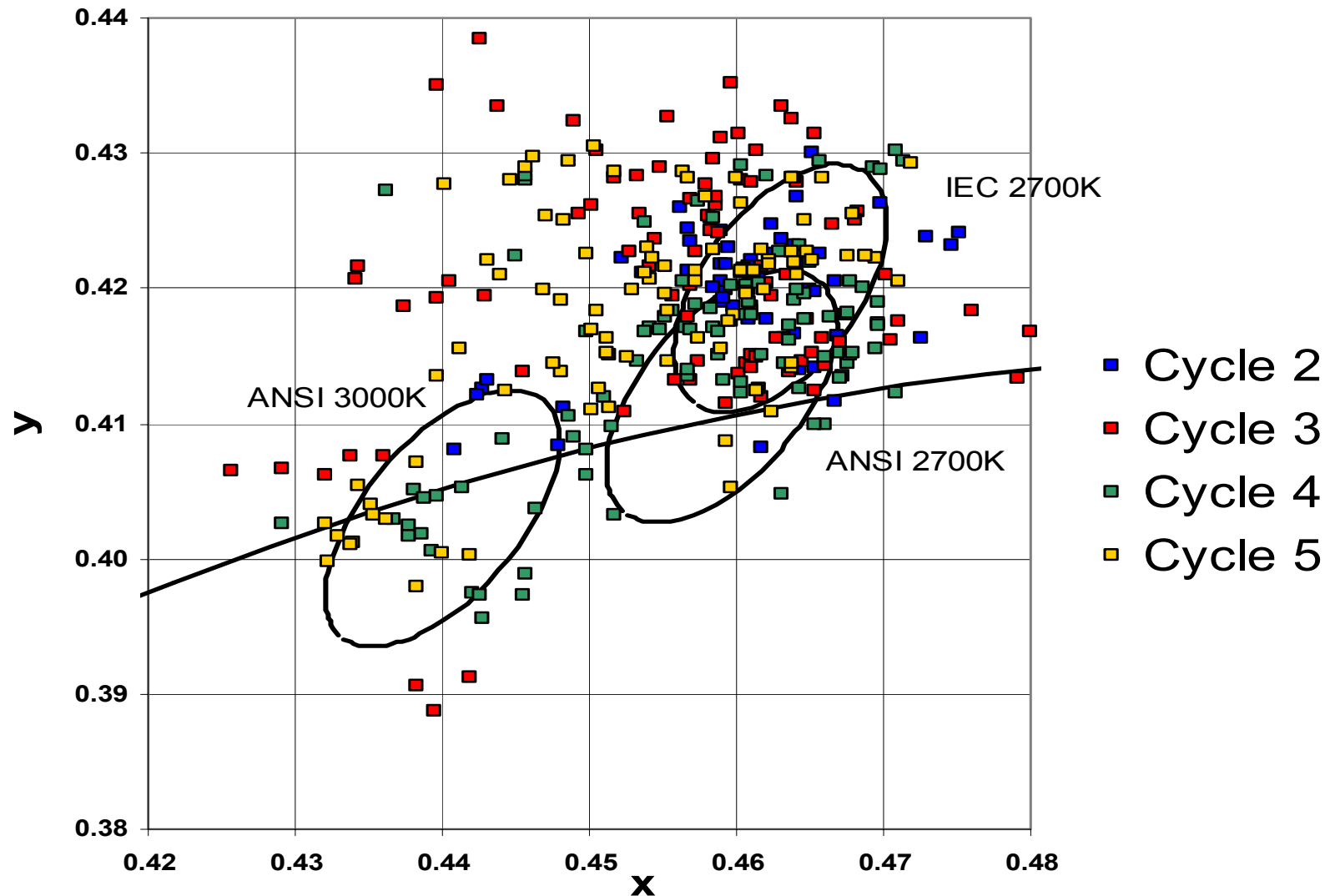


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- Color
 - Need to have greater precision in color specification
 - CCT is not a good metric
 - Communication needs to be simpler
 - Avoid using industry jargon

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- Current Status
 - NEMA submitted proposed “hockey stick”, which is being evaluated by LRC, EPA, and DOE

For more information, please go to www.lrc.rpi.edu

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Response & Proposal From Lamp Manufacturers

By

Peter Bleasby
Director of Industry Relations and Standards
Osram Sylvania

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Response To The Response

By

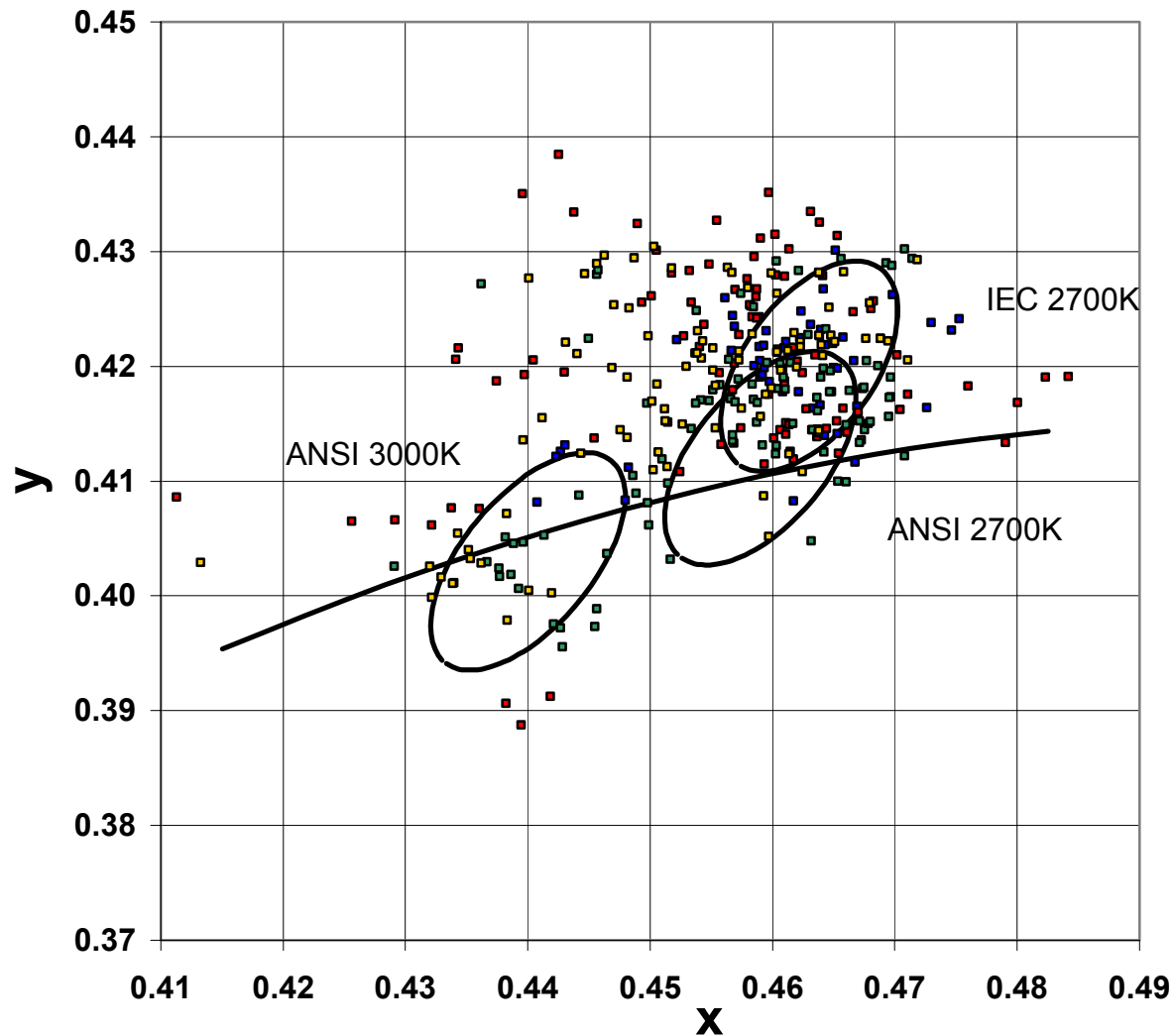
Conan O'Rourke

Technical Director

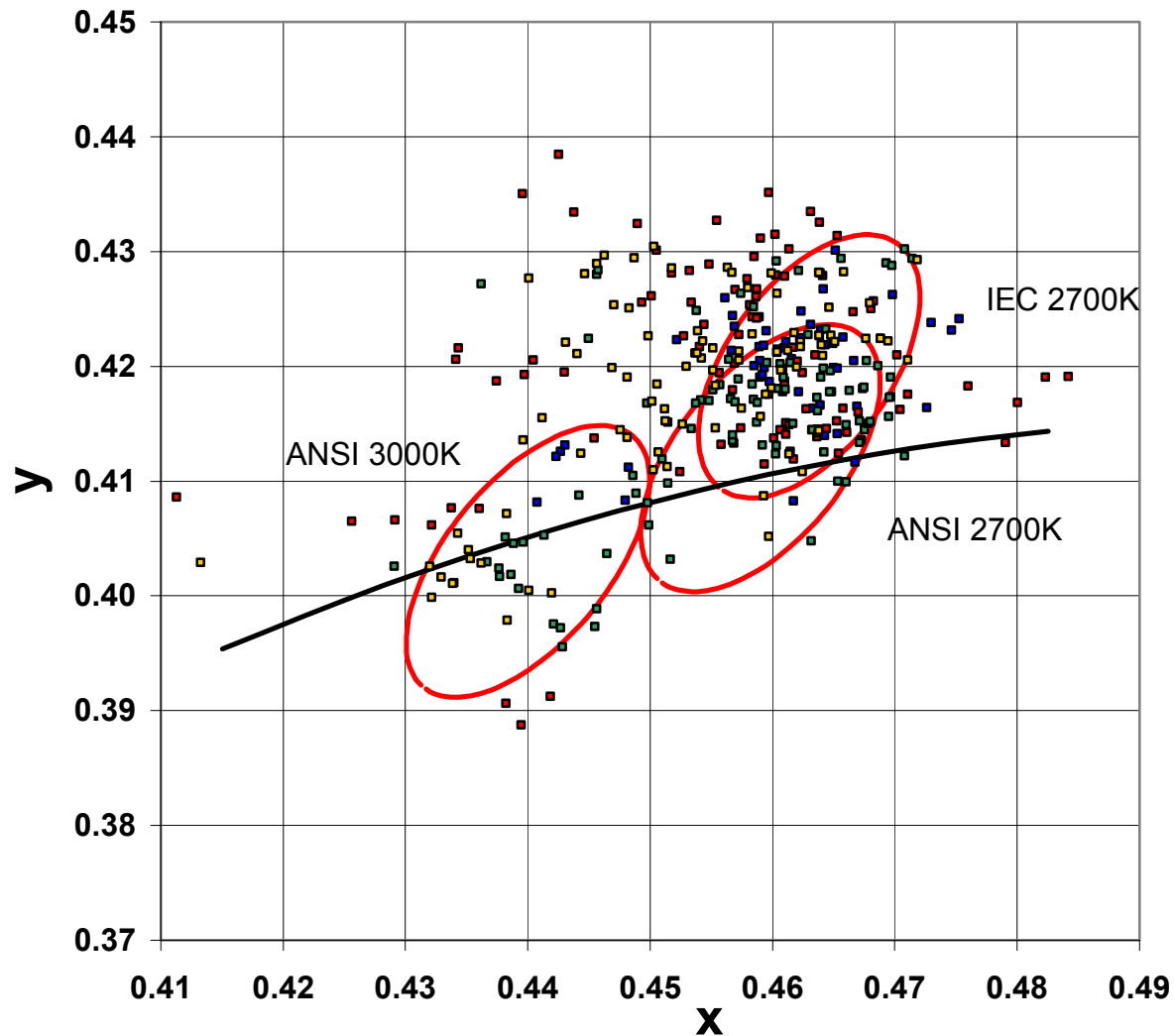
The Lighting Research Center

Actually A Perspective On CFL CCT Tolerances

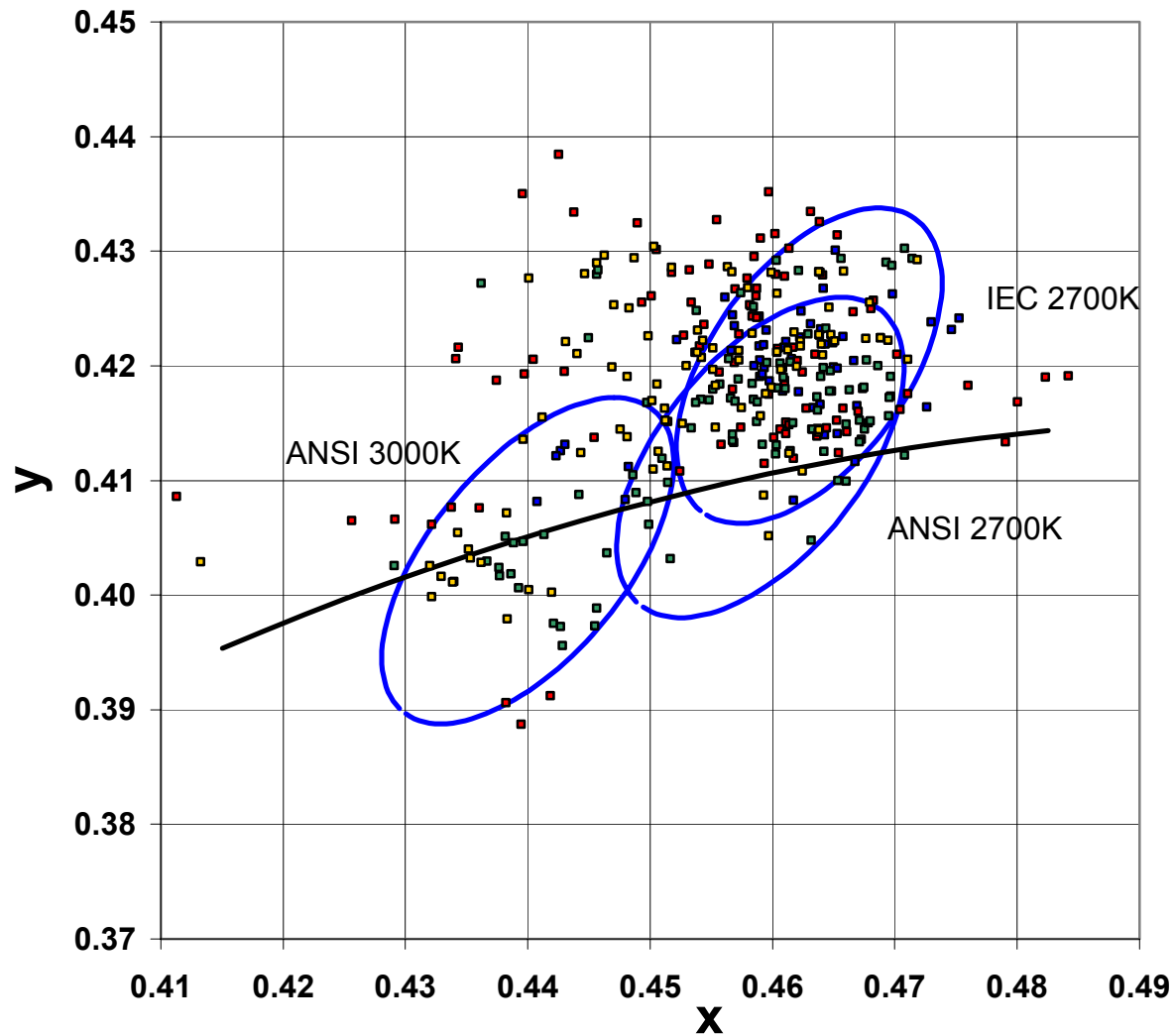
4 Step Ellipse



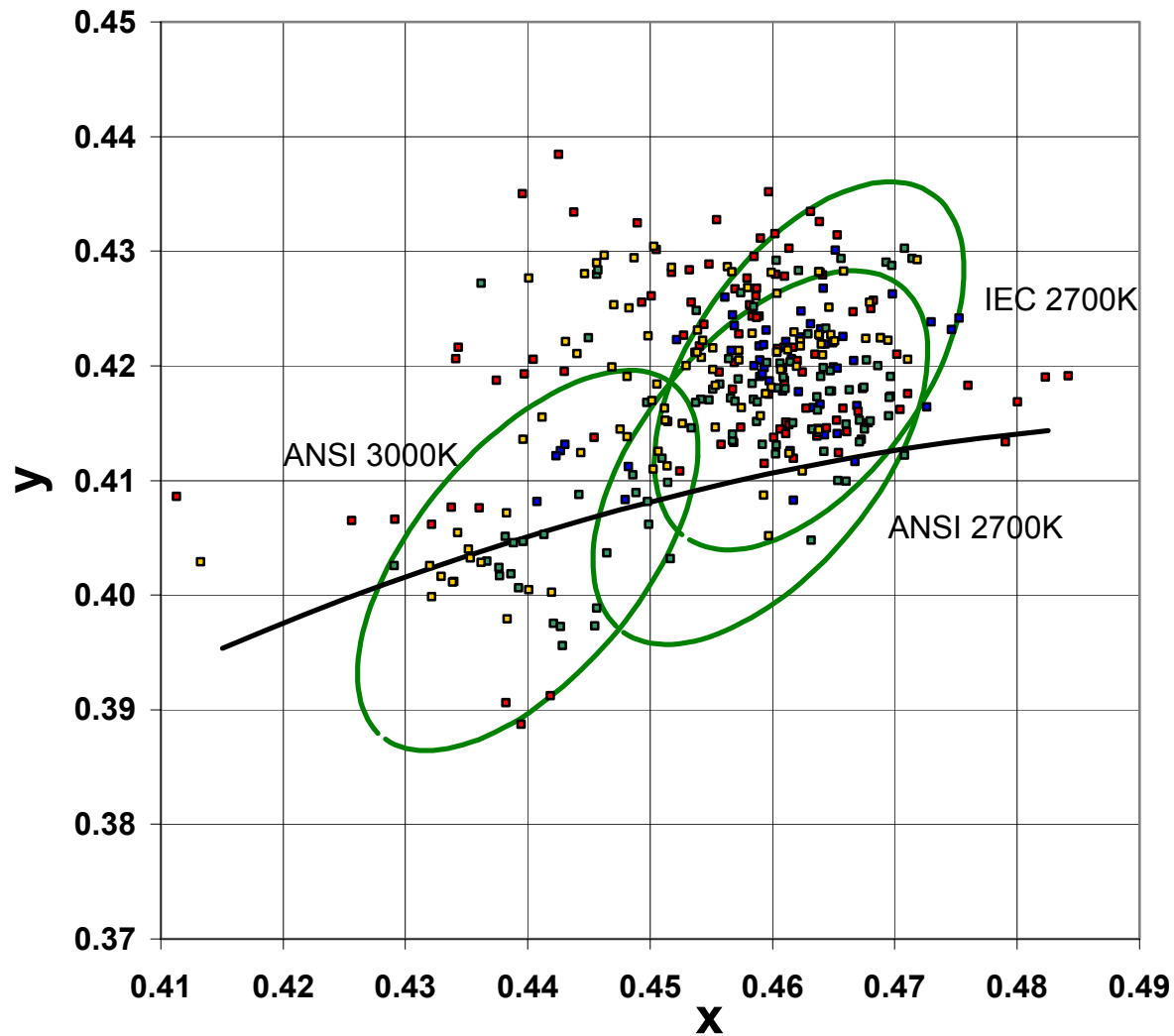
5 Step Ellipse



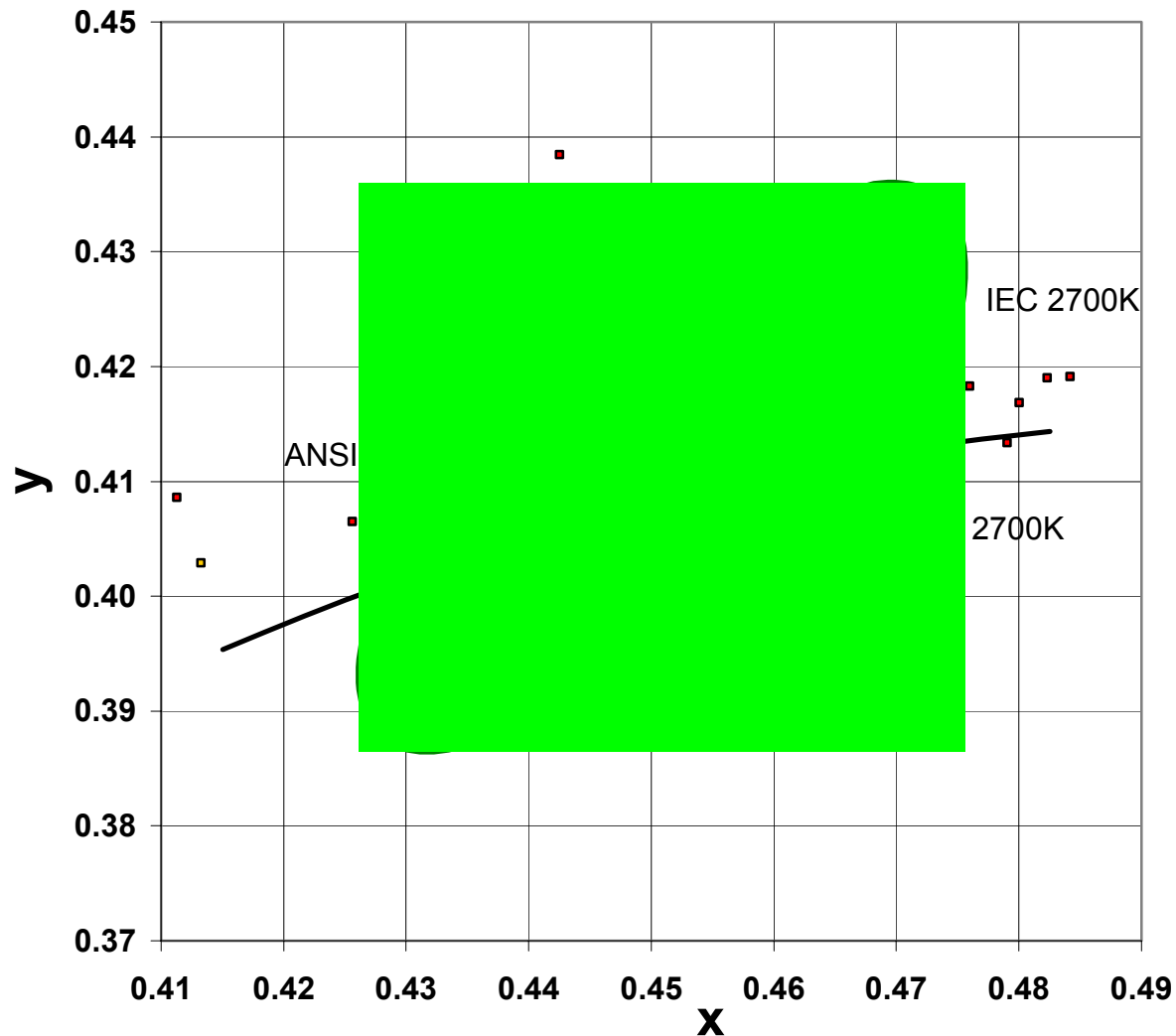
6 Step Ellipse



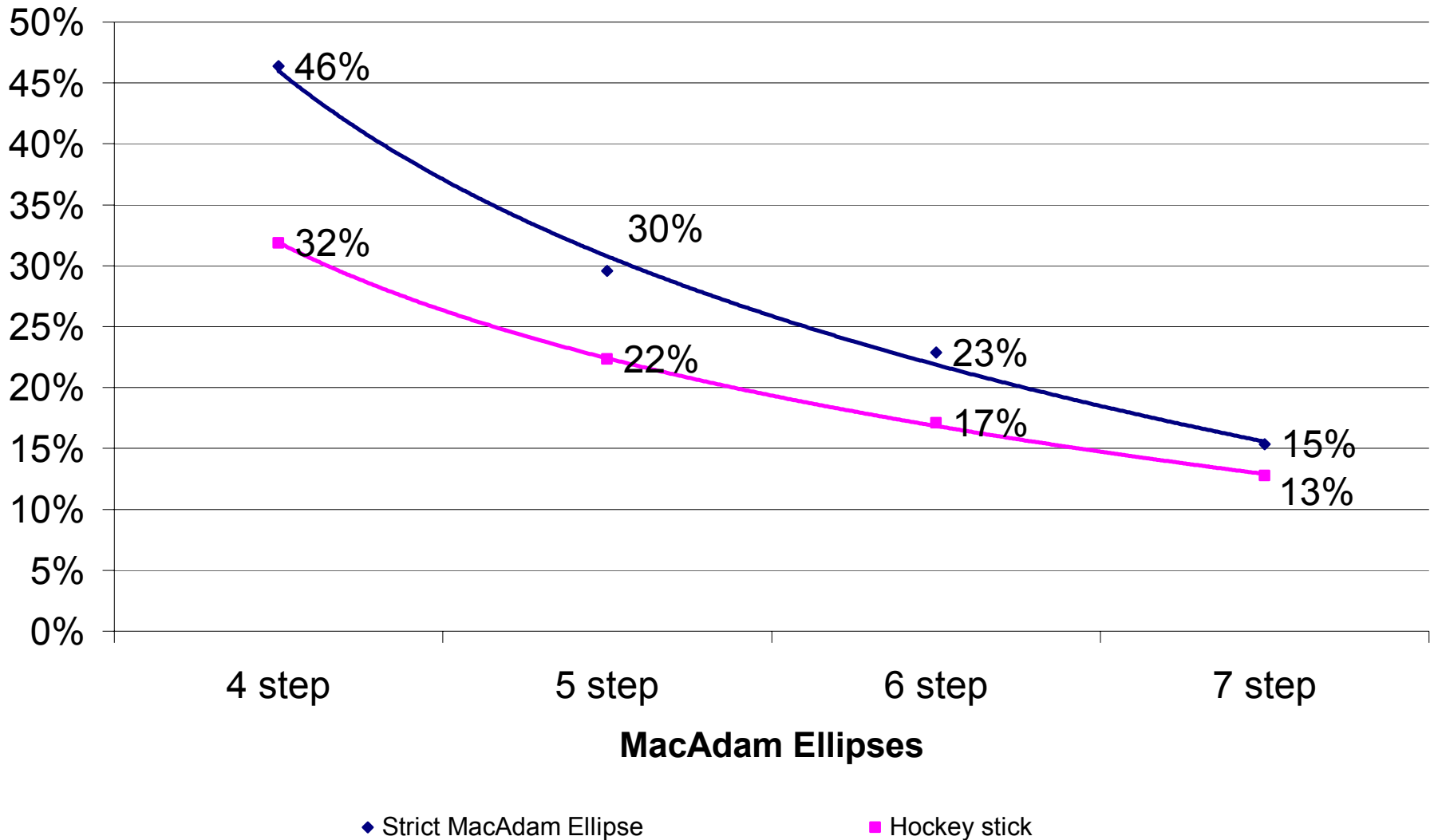
7 Step Ellipse



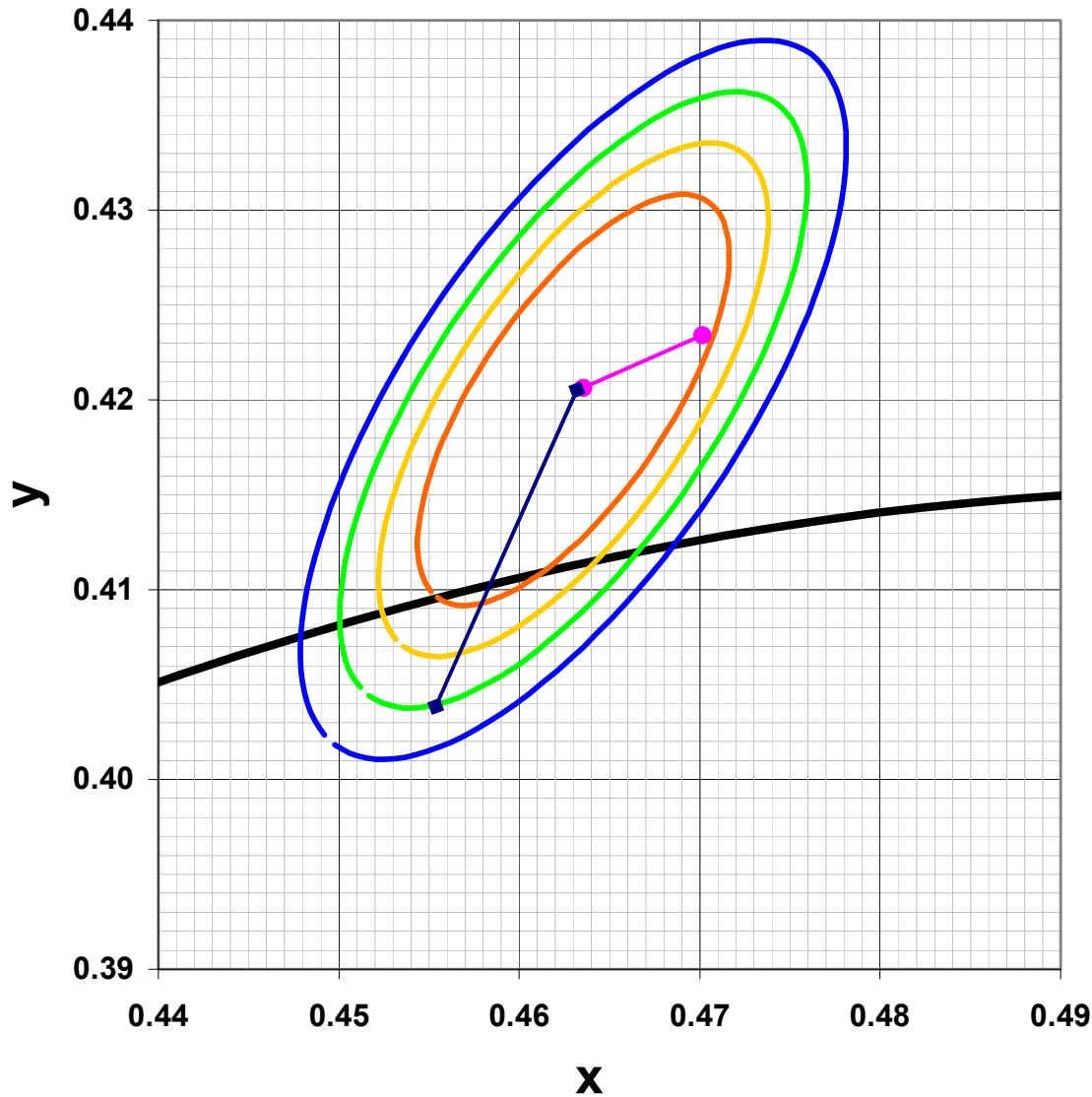
7 Step Ellipse Region



Percentage of CFLs Eliminated



Demonstration



- IEC2700K 4 step
- IEC2700K 5step
- IEC2700K 6step
- IEC2700K 7step

Questions to Answer



- If a color difference is noticeable, how much is acceptable
- Does it matter which direction?
 - Green vs purple?
 - Blue vs red?
- What is the impact on efficacy?
 - How much green is acceptable?