

Second Customer Meeting

December 10, 2010

This customer meeting was used to answer pressing questions that we as a group had regarding some of the uncertainties that were uncovered from the first customer meeting held on December 3, 2010. Questions were also developed based on a brainstorming session held on December 10, 2010.

Questions Asked

1. How are the LEDs to be controlled?
 - (a) Control LED brightness using either current control or pulse width.
 - (b) Colorimeter would be used to measure the spectrum emitted by the cluster.
 - (c) Customer wants a MATLAB script to control each LED's intensity using 8-bit control for each LED based on the desired spectrum output.
2. How "fine" should the hemisphere coordinate system be? A latitude and longitude separation of 5° yields 1296 vertices and a separation 10° yields 324 vertices.
 - (a) Customer states that they're ok with 10° coordinate fineness.
3. Is the hemisphere 1 meter in diameter or radius?
 - (a) Diameter.
4. Could a "headlight"-type unit be used to blend and focus the light emitted from each cluster?
 - (a) Customer states that this might be a good idea, but to come back later before a concrete decision is made.
 - (b) Toeing the LEDs in could also be used to address the light focusing issue.
5. Based on the literature that the customer provided, is there any chance that they would have a need of a spherical geometry rather than a hemisphere?
 - (a) Start by assuming that only a hemisphere is needed. If a spherical geometry is requested, but two hemispheres and join them together at the equator.
6. Does the hemisphere require a mounting bracket for the imaging camera?
 - (a) Probably not, but ask question again at a later date.