Team 25: CANDL

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• Status of first node:
  – Housing for light 90% complete
  – Improved accuracy of light

• Additional nodes being created

• Alignment assistant in progress
### CANDL Latency Test

<table>
<thead>
<tr>
<th>Trial #</th>
<th>Latency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20ms</td>
</tr>
<tr>
<td>2</td>
<td>18.333ms</td>
</tr>
<tr>
<td>3</td>
<td>15ms</td>
</tr>
<tr>
<td>4</td>
<td>15ms</td>
</tr>
<tr>
<td>5</td>
<td>15ms</td>
</tr>
<tr>
<td>6</td>
<td>15ms</td>
</tr>
<tr>
<td>7</td>
<td>15ms</td>
</tr>
<tr>
<td>8</td>
<td>15ms</td>
</tr>
</tbody>
</table>
• Considerations:
  – Tested with only one node
  – May be higher with multiple nodes receiving from the App
  – Will still probably not be significant delay
CANDL Color Accuracy Test

Red Values

- Correct: 56%
- 22%
- 10%
- 8%
- 4%

% Error from Actual:
- Correct
- 10%
- 20%
- 40%
- 60%
• Test subject tended to guess the correct hue
• Lights tended to appear washed out due to use of only one node and inevitable daylight
• Accuracy varied widely per test subject
• Some error may also be caused by inaccurate color representation in phone’s display
• Lit at full intensity white light
• Used infrared thermometer
• After a long period of time, lights exceed operating range
• Heat sink lights, add vents and/or include temperature control in software
• Latency is not a problem
• Spend some more time calibrating color
• Figure out the best way to deal with heat
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Questions?