



**Lumileds LLC**  
 370 West Trimble Road  
 San Jose, California 95131  
 USA

July 30th, 2015

**Product Change Notification #: 2015013A**

**Subject: Lumileds announces new manufacturing line for LUXEON 3014**

Dear Valued Customers,

Please take note that starting from 2015 ww31, an additional manufacturing line will be introduced for the following Lumileds product:

- LUXEON 3014

Lumileds will be ready to ship LUXEON 3014 production parts from both existing and new manufacturing lines under the same part numbers and 12NCs. We will continue to use reel Lot ID to provide full traceability for both existing and new manufacturing lines. Please see "Attachment" section for related part number list and more details.

Lumileds is poised to adopt this new manufacturing line in order to provide our customer additional volume flexibility and better assurance of supply, we are seeking customer's final approval to proceed.

|  |   |
|--|---|
| <b>Description of Change(s):</b>   | Parts will be shipped from both existing and new manufacturing line   |
| <b>Products affected:</b>  | LUXEON 3014 (complete part number list can be found in "Attachments")   |
| <b>Reference Documents/Attachments:</b>  | All technical details can be found in the "Attachments" section of this document  |
| <b>Scheduled first shipment date for change:</b>   | After 2015 ww31, upon customer agreement  |
| <b>Anticipated (positive and negative) impact on form, fit, function or reliability:</b> | No change on in product luminous flux, color point, and forward voltage specifications<br>No change in recommended solder pad design<br>No change in optical design<br>No change on in reliability and long-term performance (e.g. LM-80) |
| <b>Supplier Qualification plan results, where applicable:</b>                            | N/A   |
| <b>Custom part number(s), if applicable:</b>   | Affected Lumileds part numbers can be found in the "Attachments" section of this document   |

**Next Steps**

As a next step, please kindly provide confirmation to Lumileds to acknowledge and accept this change, and provide Lumileds with any further requirements at your earliest convenience, but no later than Sep 30th, 2015.

**Contact:**

If you have any questions, or need any further assistance, please contact your Lumileds sales representative.

Lumileds will continue to develop its portfolio and release new and improved products. The cooperative relationship that has been developed with you is of great value to Lumileds, and it is our desire to further cultivate this relationship. We remain eager to supply your future product requirements with our world-class quality product lines.

Best Regards,  
 Rick Hamburger  
 Product Line Director

## Attachments

### Appendix A: Affected part numbers

| item | Level 1.5 PN       | Level 1.5 12NC | Level 1 PN         | Level1 12NC  |
|------|--------------------|----------------|--------------------|--------------|
|      | NA                 | NA             | L130-2780001400001 | 927700496401 |
|      | NA                 | NA             | L130-3080001400001 | 927700496501 |
|      | NA                 | NA             | L130-3580001400001 | 927700496601 |
|      | NA                 | NA             | L130-4080001400001 | 927700496701 |
|      | NA                 | NA             | L130-5080001400001 | 927700496801 |
|      | NA                 | NA             | L130-5780001400001 | 927700496901 |
|      | NA                 | NA             | L130-6580001400001 | 927700497001 |
|      | L130-65800014LAAA0 | 927701148501   | L130-6580001400001 | 927700497001 |
|      | L130-35800014LAAC0 | 927701167001   | L130-3580001400001 | 927700496601 |
|      | L130-27800014LAAE0 | 927701186101   | L130-2780001400001 | 927700496401 |
|      | L130-65800014LAAG0 | 927701200601   | L130-6580001400001 | 927700497001 |
|      | L130-35800014LAAH0 | 927701205401   | L130-3580001400001 | 927700496601 |
|      | L130-40800014EL020 | 927701206401   | L130-4080001400001 | 927700496701 |
|      | L130-65800014LAAJ0 | 927701217301   | L130-6580001400001 | 927700497001 |
|      | L130-57800014EJ020 | 927701205501   | L130-5780001400001 | 927700496901 |
|      | L130-65800014EK020 | 927701205601   | L130-6580001400001 | 927700497001 |
|      | L130-57800014LAAK0 | 927701239001   | L130-5780001400001 | 927700496901 |
|      | L130-35800014ED020 | 927701200401   | L130-3580001400001 | 927700496601 |
|      | L130-27800014EU050 | 927701214401   | L130-2780001400001 | 927700496401 |
|      | L130-30800014EV050 | 927701214501   | L130-3080001400001 | 927700496501 |
|      | L130-40800014HM020 | 927701276801   | L130-4080001400001 | 927700496701 |
|      | L130-50800014HN020 | 927701276901   | L130-5080001400001 | 927700496801 |
|      | L130-65800014HP020 | 927701277001   | L130-6580001400001 | 927700497001 |
|      | L130-40800014LAAP0 | 927701289301   | L130-4080001400001 | 927700496701 |
|      | L130-65800014LAAP0 | 927701289401   | L130-6580001400001 | 927700497001 |
|      | L130-50800014LAAQ0 | 927701290401   | L130-5080001400001 | 927700496801 |
|      | L130-57800014LAAQ0 | 927701290301   | L130-5780001400001 | 927700496901 |
|      | L130-65800014LAAQ0 | 927701290501   | L130-6580001400001 | 927700497001 |
|      | L130-30800014LAAN0 | 927701286401   | L130-3080001400001 | 927700496501 |
|      | L130-40800014LAAN0 | 927701286501   | L130-4080001400001 | 927700496701 |
|      | L130-50800014LAAN0 | 927701286601   | L130-5080001400001 | 927700496801 |
|      | L130-65800014LAAN0 | 927701286701   | L130-6580001400001 | 927700497001 |
|      | L130-40800014HQ020 | 927701287801   | L130-4080001400001 | 927700496701 |
|      | L130-57800014HR020 | 927701287901   | L130-5780001400001 | 927700496901 |
|      | L130-65800014HS020 | 927701288001   | L130-6580001400001 | 927700497001 |
|      | L130-50800014LAAT0 | 927701310201   | L130-5080001400001 | 927700496801 |

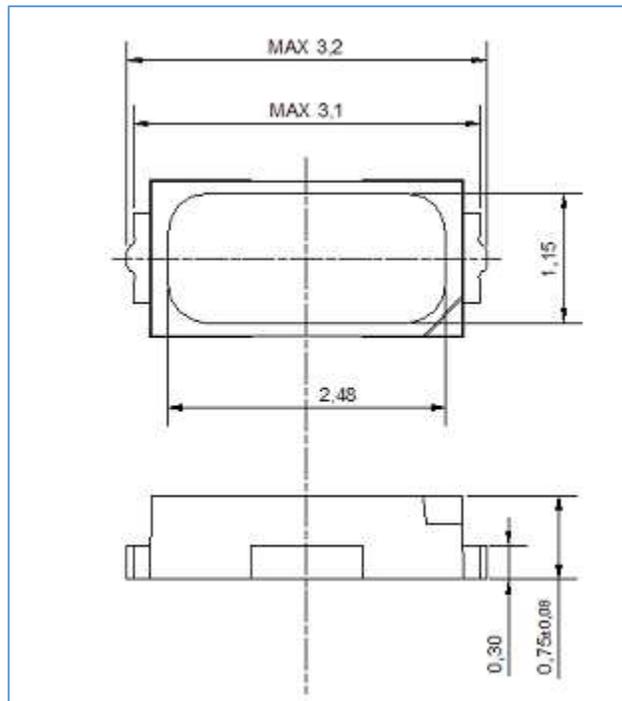
|  |                    |              |                    |              |
|--|--------------------|--------------|--------------------|--------------|
|  | L130-40800014KA020 | 927701327001 | L130-4080001400001 | 927700496701 |
|  | L130-50800014KB020 | 927701327101 | L130-5080001400001 | 927700496801 |
|  | L130-65800014LAAX0 | 927701346801 | L130-6580001400001 | 927700497001 |

## Appendix B: Label and packaging of new manufacturing line



LUXEON 3014 - new manufacturing lin

## Appendix C: Mechanical (package dimension/ footprint layout)



All dimensions are in millimeters. Tolerance:  $\pm 0.10\text{mm}$ .

New production line and existing production line shares exact same mechanical parameters.

### Appendix D: Key L1 product spec comparison

| Item   | New manufacturing line   | Existing manufacturing line                             |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
|--|--|---|------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|--|-----|------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| <b>Luminous Flux<br/>at rating condition</b>   | <table border="1"> <thead> <tr> <th>CCT</th> <th>Typical lm</th> </tr> </thead> <tbody> <tr><td>2700K</td><td>23.0</td></tr> <tr><td>3000K</td><td>24.5</td></tr> <tr><td>3500K</td><td>25.0</td></tr> <tr><td>4000K</td><td>26.0</td></tr> <tr><td>5000K</td><td>26.0</td></tr> <tr><td>5700K</td><td>26.0</td></tr> <tr><td>6500K</td><td>26.0</td></tr> </tbody> </table> | CCT   | Typical lm | 2700K | 23.0 | 3000K | 24.5 | 3500K | 25.0 | 4000K | 26.0 | 5000K | 26.0 | 5700K | 26.0 | 6500K | 26.0 | <table border="1"> <thead> <tr> <th>CCT</th> <th>Typical lm</th> </tr> </thead> <tbody> <tr><td>2700K</td><td>23.0</td></tr> <tr><td>3000K</td><td>24.5</td></tr> <tr><td>3500K</td><td>25.0</td></tr> <tr><td>4000K</td><td>26.0</td></tr> <tr><td>5000K</td><td>26.0</td></tr> <tr><td>5700K</td><td>26.0</td></tr> <tr><td>6500K</td><td>26.0</td></tr> </tbody> </table> | CCT | Typical lm | 2700K | 23.0 | 3000K | 24.5 | 3500K | 25.0 | 4000K | 26.0 | 5000K | 26.0 | 5700K | 26.0 | 6500K | 26.0 |
|  | CCT  | Typical lm  |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
|  | 2700K  | 23.0  |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
|  | 3000K  | 24.5  |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
|  | 3500K  | 25.0  |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
|  | 4000K  | 26.0  |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
|  | 5000K  | 26.0  |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
|  | 5700K  | 26.0  |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
| 6500K  | 26.0   |   |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
| CCT  | Typical lm   |   |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
| 2700K  | 23.0   |   |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
| 3000K  | 24.5   |   |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
| 3500K  | 25.0   |   |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
| 4000K  | 26.0   |   |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
| 5000K  | 26.0   |   |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
| 5700K  | 26.0   |   |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
| 6500K  | 26.0   |   |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
| <b>Forward voltage<br/>at rating condition</b> | Minimum: 2.9V<br><br>Typical: 3.1V<br><br>Maximum: 3.4V  | Minimum: 2.9V<br><br>Typical: 3.1V<br><br>Maximum: 3.4V |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
| <b>Hot Cold Factor<br/>(85°C to 25°C)</b>      | Typical: 0.89  | Typical: 0.89   |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |  |     |            |       |      |       |      |       |      |       |      |       |      |       |      |       |      |

Notice: rating condition is 60mA, 25°C