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Bridgelux, Inc.

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
OAKLAND DIVISION

Everlight Electronics Co., Ltd.,

Plaintiff,

v.

Bridgelux, Inc.,

Defendant.

Bridgelux, Inc.,

Counterclaimant,

v.

Everlight Electronics Co., Ltd. and
Everlight Americas, Inc.,

Counterdefendants.

Case No. 4:17-cv-03363-JSW

**BRIDGELUX, INC.'S INITIAL
DISCLOSURE OF ASSERTED CLAIMS
AND INFRINGEMENT CONTENTIONS
TO EVERLIGHT ELECTRONICS CO.,
LTD. AND EVERLIGHT AMERICAS, INC.
PURSUANT TO LOCAL PATENT RULES
3-1 AND 3-2**

Complaint Filed: June 10, 2017

Answer/Counterclaim Filed: July 6, 2017

Judge: Hon. Jeffrey S. White, Courtroom 5

Pursuant to Local Patent Rule 3-1 and 3-2, Defendant-Counterclaimant Bridgelux, Inc. (“Bridgelux”) hereby provides to Plaintiff Everlight Electronics Co, Ltd. (“Everlight”) and Everlight Americas, Inc. (“Everlight Americas”) the following Infringement Contentions (“Contentions”) for the asserted claims of U.S. Patent Nos. 6,869,812 (“the ’812 Patent”); 8,092,051 (“the ’051 Patent”); 8,256,929 (“the ’929 Patent”); and 8,567,988 (“the ’988 Patent”) (collectively, the “Bridgelux Patents”).

Everlight and Everlight Americas have not yet produced any documents or things, or provided any deposition testimony or other discovery in this action. Bridgelux’s investigation regarding these and other potential grounds of patent infringement is ongoing.

Claim construction proceedings have not yet begun and the Court has not construed the claims of the Bridgelux Patents. Bridgelux therefore reserves all rights to modify and supplement these Contentions as necessary and/or appropriate as discovery in this case progresses and as the Court construes the asserted claims, including to assert infringement under the doctrine of equivalents, if necessary. Bridgelux further reserves the right to modify and supplement its contentions following the receipt and testing of samples of Everlight’s Accused Products. Bridgelux further reserves all rights under the Federal Rules of Civil Procedure to assert additional claims or defenses.

The Contentions set forth below are based solely on Bridgelux’s current knowledge and belief based on the information presently available to Bridgelux given that discovery has not occurred in earnest to date in the above-captioned action.

I. PATENT LOCAL RULE 3-1(A)

Based upon the information currently available to it, Bridgelux contends that Everlight and Everlight Americas infringe claims 1-3 of the ’812 Patent, claims 3 and 5 of the ’051 Patent, claims 1, 3, and 5 of the ’929 Patent, and claims 1, 3, 5, 6, and 9 of the ’988 Patent (collectively,

the “Asserted Claims”) by making, using, selling, offering to sell, and/or importing a product made by the Asserted Claims and/or by contributing or inducing direct infringement of the Asserted Claims by others.

<u>Claim</u>	<u>Patent</u>	<u>Statutory Subsection</u>
Claim 1	'988 Patent	§ 271(a)
Claim 3	'988 Patent	§ 271(a)
Claim 5	'988 Patent	§ 271(a)
Claim 6	'988 Patent	§ 271(a)
Claim 9	'988 Patent	§ 271(a)
Claim 1	'812 Patent	§ 271(a)
Claim 2	'812 Patent	§ 271(a)
Claim 3	'812 Patent	§ 271(a)
Claim 1	'929 Patent	§ 271(g)
Claim 3	'929 Patent	§ 271(g)
Claim 5	'929 Patent	§ 271(g)
Claim 1	'051 Patent	§ 271(g)
Claim 5	'051 Patent	§ 271(g)

Bridgelux reserves the right to supplement or modify the asserted patents and claims upon further information and discovery.

II. PATENT LOCAL RULE 3-1(B)

Based upon the information currently available to Bridgelux, Bridgelux contends that Everlight’s and Everlight Americas’ making, using, selling, offering for sale and/or importation of the following enumerated product families (the “Accused Instrumentalities”) infringes the

Asserted Claims of the Bridgelux Patents:

- 2835 9V 1W 6500K
- XUAN 1313 8W LED
- KK2C-N4040N4P3S2Z6/2T
- LK2C-N4040N4P3S2Z6/2T
- LK2C-N3030N4P3S2Z6/2T
- KK2C-N3030N4P3S2Z6/2T
- KK2C-H3030
- KK2C-H4040
- EAHE2835WD13
- EAHE2835WD33
- 67-21S/KK2C-H3030M31N42936Z6/2T

<u>Claim</u>	<u>Accused Instrumentality</u>	<u>Counterdefendant</u>
Claim 1 ('988 Patent)	2835 9V 1W 6500K	Everlight and/or Everlight Americas
Claim 3 ('988 Patent)	2835 9V 1W 6500K	Everlight and/or Everlight Americas
Claim 6 ('988 Patent)	2835 9V 1W 6500K	Everlight and/or Everlight Americas
Claim 1 ('988 Patent)	XUAN 1313 8W	Everlight and/or Everlight Americas
Claim 5 ('988 Patent)	XUAN 1313 8W	Everlight and/or Everlight Americas
Claim 6 ('988 Patent)	XUAN 1313 8W	Everlight and/or Everlight Americas
Claim 9 ('988 Patent)	XUAN 1313 8W	Everlight and/or Everlight Americas
Claim 1 ('988 Patent)	KK2C-N4040N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 1 ('988 Patent)	LK2C-N4040N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 1 ('988 Patent)	LK2C-N3030N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 1 ('988 Patent)	KK2C-N3030N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 3 ('988 Patent)	KK2C-N4040N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 3 ('988 Patent)	LK2C-N4040N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 3 ('988 Patent)	LK2C-N3030N4P3S2Z6/2T	Everlight and/or Everlight Americas

Claim 3 ('988 Patent)	KK2C-N3030N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 6 ('988 Patent)	KK2C-N4040N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 6 ('988 Patent)	LK2C-N4040N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 6 ('988 Patent)	LK2C-N3030N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 6 ('988 Patent)	KK2C-N3030N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 9 ('988 Patent)	KK2C-N4040N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 9 ('988 Patent)	LK2C-N4040N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 9 ('988 Patent)	LK2C-N3030N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 9 ('988 Patent)	KK2C-N3030N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 1 ('812 Patent)	2835 9V 1W 6500K	Everlight and/or Everlight Americas
Claim 2 ('812 Patent)	2835 9V 1W 6500K	Everlight and/or Everlight Americas
Claim 3 ('812 Patent)	2835 9V 1W 6500K	Everlight and/or Everlight Americas
Claim 1 ('812 Patent)	XUAN 1313 8W	Everlight and/or Everlight Americas
Claim 2 ('812 Patent)	XUAN 1313 8W	Everlight and/or Everlight Americas
Claim 3 ('812 Patent)	XUAN 1313 8W	Everlight and/or Everlight Americas
Claim 1 ('812 Patent)	KK2C-H3030	Everlight and/or Everlight Americas
Claim 1 ('812 Patent)	KK2C-H4040	Everlight and/or Everlight Americas
Claim 1 ('812 Patent)	EAHE2835WD13	Everlight and/or Everlight Americas
Claim 1 ('812 Patent)	EAHE2835WD33	Everlight and/or Everlight Americas
Claim 1 ('812 Patent)	67-21S/KK2C-H3030M31N42936Z6/2T	Everlight and/or Everlight Americas
Claim 2 ('812 Patent)	67-21S/KK2C-H3030M31N42936Z6/2T	Everlight and/or Everlight Americas
Claim 3 ('812 Patent)	67-21S/KK2C-H3030M31N42936Z6/2T	Everlight and/or Everlight Americas
Claim 1 ('929 Patent)	2835 9V 1W 6500K	Everlight and/or Everlight Americas

Claim 3 ('988 Patent)	2835 9V 1W 6500K	Everlight and/or Everlight Americas
Claim 5 ('988 Patent)	2835 9V 1W 6500K	Everlight and/or Everlight Americas
Claim 1 ('929 Patent)	XUAN 1313 8W	Everlight and/or Everlight Americas
Claim 5 ('988 Patent)	XUAN 1313 8W	Everlight and/or Everlight Americas
Claim 1 ('929 Patent)	KK2C-N4040N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 1 ('929 Patent)	LK2C-N4040N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 1 ('929 Patent)	LK2C-N3030N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 1 ('929 Patent)	KK2C-N3030N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 3 ('929 Patent)	KK2C-N4040N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 3 ('929 Patent)	LK2C-N4040N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 3 ('929 Patent)	LK2C-N3030N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 3 ('929 Patent)	KK2C-N3030N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 5 ('929 Patent)	KK2C-N4040N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 5 ('929 Patent)	LK2C-N4040N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 5 ('929 Patent)	LK2C-N3030N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 5 ('929 Patent)	KK2C-N3030N4P3S2Z6/2T	Everlight and/or Everlight Americas
Claim 1 ('051 Patent)	XUAN 1313 8W	Everlight and/or Everlight Americas
Claim 5 ('051 Patent)	XUAN 1313 8W	Everlight and/or Everlight Americas

Bridgelux reserves the right to supplement or modify the Accused Instrumentalities upon further information and discovery.

III. PATENT LOCAL RULE 3-1(C)

Attached as Appendix A is a chart identifying specifically where each limitation of each

asserted claims of the Bridgelux Patents is found for the Accused Instrumentalities.

Bridgelux reserves the right to supplement and/or modify these contentions, including Appendix A, should it become aware of additional information or evidence relating to the Accused Instrumentalities and methods of making the same. Further, Bridgelux reserves the right to supplement and/or modify these contentions following receipt and testing of samples and expert consultation regarding such testing. Moreover, Bridgelux reserves the right to supplement and/or modify these contentions following claim construction to the extent that claim construction alters any of the assertions set forth in the chart below. And lastly, Bridgelux reserves all rights to supplement and/or modify these contentions as necessary as discovery in this case progresses.

IV. PATENT LOCAL RULE 3-1(D)

Everlight directly infringes at least the Asserted Claims of the Bridgelux Patents by actively and intentionally making, using, selling, and/or offering to sell and the patented invention within the United States, or importing the patented invention into the United States, in violation of Bridgelux's rights under the Bridgelux Patents and in violation of 35 U.S.C. § 271(a) and/or by actively and intentionally offering to sell, and/or importing within the United States the Accused Instrumentalities, which are made by a process patented in the United States, in violation of Bridgelux's rights under the Bridgelux Patents and in violation of 35 U.S.C. § 271(g).

Properly construed, the claims of the Bridgelux Patents do not require multiple parties to perform the different steps of the claimed methods. To the extent that the claims are construed to require multiple parties to perform the steps of the claimed methods, Everlight exercises control or direction over each of those parties regarding each step of the claimed methods.

V. PATENT LOCAL RULE 3-1(E)

The chart attached in Appendix A shows that each limitation of each asserted claim of the Bridgelux Patents is literally present in the Accused Products or, alternatively, is present under the doctrine of equivalents. Bridgelux reserves all rights to modify and supplement Appendix A as warranted by future developments. Bridgelux alleges that Everlight's Accused Products would literally infringe all asserted claims, thus obviating the need to consider the doctrine of equivalents at this time. To the extent that any limitation is found to be not literally present, Bridgelux asserts that, if any differences between the claim elements and the accused instrumentalities are found to exist, such differences are insubstantial, and such limitation is present under the doctrine of equivalents.

Bridgelux reserves the right to assert infringement under the doctrine of equivalents in light of discovery taken, the Court's *Markman* ruling, and/or other future developments in this litigation.

VI. PATENT LOCAL RULE 3-1(F)

The asserted claims in the '812 Patent are entitled to a priority date at least as early as May 13, 2003.

The asserted claims in the '988 Patent are entitled to a priority date at least as early as September 29, 2008.

The asserted claims in the '929 Patent are entitled to a priority date at least as early as September 29, 2008.

The asserted claims in the '051 Patent are entitled to a priority date at least as early as September 29, 2008.

VII. PATENT LOCAL RULE 3-1(G)

Bridgelux's products listed below practice the Asserted Claim:

<u>Claim</u>	<u>Patent</u>	<u>Bridgelux Products¹</u>
Claim 1	'988 Patent	Gen 6 COB Gen 7 COB Vesta Dim-warm COB SMD
Claim 5	'988 Patent	Gen 6 COB Gen 7 COB
Claim 6	'988 Patent	Gen 6 COB Gen 7 COB Vesta Dim-warm COB SMD
Claim 9	'988 Patent	Gen 6 COB Gen 7 COB Vesta Dim-warm COB SMD
Claim 1	'812 Patent	Gen 6 COB Vesta tunable white linear module EB Gen 2 linear module SMD 2835 0.2W 3V SMD 2835 0.2W 3V Gen 2 SMD 2835 0.5W 3V SMD 2835 1W 9V Gen 2 SMD 2835 1W 12V SMD 5050 5W 9V SMD 5050 5W 36V Chip 1734 Chip 2345
Claim 2	'812 Patent	Vesta tunable white linear module SMD 2835 0.2W 3V SMD 2835 0.5W 3V SMD 2835 1W 9V Gen 2 SMD 2835 1W 12V SMD 5050 5W 9V SMD 5050 5W 36V Chip 1734

¹ The products have been identified based on product families; however, some individual part numbers within a product family may not embody the associated claim.

Claim 3	'812 Patent	Vesta tunable white linear module SMD 2835 0.2W 3V SMD 2835 0.5W 3V SMD 2835 1W 9V Gen 2 SMD 2835 1W 12V SMD 5050 5W 9V SMD 5050 5W 36V Chip 1734
Claim 1	'929 Patent	Gen 6 COB Gen 7 COB Vesta Dim-warm COB SMD
Claim 5	'929 Patent	Gen 6 COB Gen 7 COB Vesta Dim-warm COB SMD
Claim 1	'051 Patent	Gen 6 COB Gen 7 COB Vesta Dim-warm COB SMD
Claim 5	'051 Patent	Gen 6 COB Gen 7 COB Vesta Dim-warm COB SMD

Bridgelux reserves the right to edit or supplement this list as its products are revised, updated, and/or supplemented.

VIII. PATENT LOCAL RULE 3-1(H)

Everlight and Everlight Americas have not yet produced any documents or things. Based upon the information currently available to Bridgelux, Bridgelux contends that Everlight and Everlight Americas first infringed the Bridgelux Patents no later than when Everlight and Everlight Americas respectively first made, used, sold, offered for sale and/or imported the Accused Instrumentalities in the U.S.

Bridgelux contends that Bridgelux's damages began on or after when Everlight and Everlight Americas first infringed the Bridgelux Patents and not later than July 13, 2017. Bridgelux further contends that damages are ongoing as Everlight and Everlight Americas continues to infringe the Bridgelux Patents.

Bridgelux reserves the right to supplement or modify the timing of Everlight's and Everlight Americas' respective first infringement and the duration of damages upon further information and discovery.

IX. PATENT LOCAL RULE 3-1(I)

Bridgelux does not allege willful infringement against Everlight or Everlight Americas. Bridgelux reserves all rights to supplement and/or modify these contentions as necessary as discovery in this case progresses.

X. PATENT LOCAL RULE 3-2

Bridgelux identifies the following documents in accordance with Local Patent Rule 3-2. Bridgelux's identification of documents pursuant to Local Patent Rule 3-2 should not be construed as an agreement or admission that any particular document satisfies any particular aspect of any category of Local Patent Rule 3-2. Bridgelux's investigation is ongoing. If and when any additional documents are required to be disclosed under this rule are discovered, Bridgelux will timely produce them.

A. Patent Local Rule 3-2(a)

After a reasonable search, Bridgelux has located no non-privileged responsive documents in this category.

B. Patent Local Rule 3-2(b)

After a reasonable search, Bridgelux has located not yet non-privileged responsive

documents in this category. Bridgelux is continuing its search and will produce documents which include further information responsive to this category.

C. Patent Local Rule 3-2(c)

Documents corresponding to 3-2(c) can be found at bates range BLX00000001-BLX00001362, BLX00001364-BLX00001366, BLX00001374-BLX00001393, BLX00001395-BLX00001800, BLX00001808-BLX00001809, BLX00001917-BLX00002068, BLX00002073-BLX00002471, BLX00002479-BLX00002583.

D. Patent Local Rule 3-2(d)

Documents corresponding to 3-2(d) can be found at bates range BLX00001363, BLX00001367-BLX00001373, BLX00001394, BLX00001802-BLX00001807, BLX00001910-BLX00001916, BLX00002069-BLX00002071, BLX00002472-BLX00002478, BLX00002584-BLX00002585, BLX00002587-BLX00002589.

E. Patent Local Rule 3-2(e)

After a reasonable search, Bridgelux has located not yet non-privileged responsive documents in this category. Bridgelux is continuing its search and will produce documents which include further information responsive to this category.

F. Patent Local Rule 3-2(f)

Documents corresponding to 3-2(f) can be found at bates range BLX00001363, BLX00001367-BLX00001373, BLX00001394, BLX00001802-BLX00001807, BLX00001910-BLX00001916, BLX00002069-BLX00002071, BLX00002472-BLX00002478, BLX00002584-BLX00002585, BLX00002587-BLX00002589.

G. Patent Local Rule 3-2(g)

Documents corresponding to 3-2(g) can be found at bates range BLX00002599-BLX00002675. These documents are subject to a confidentiality agreement with a Non-Party. Bridgelux will be producing these documents once it has received consent from the Non-Party, or by operation of Section 11 of the presumptive stipulated protective order between the parties.

H. Patent Local Rule 3-2(h)

Documents corresponding to 3-2(g) can be found at bates range BLX00002599-BLX00002675. These documents are subject to a confidentiality agreement with a Non-Party. Bridgelux will be producing these documents once it has received consent from the Non-Party, or by operation of Section 11 of the presumptive stipulated protective order between the parties.

I. Patent Local Rule 3-2(i)

Documents corresponding to 3-2(i) can be found at bates range BLX00001801, BLX00002072, BLX00002586, BLX00002590-BLX00002598.

J. Patent Local Rule 3-2(j)

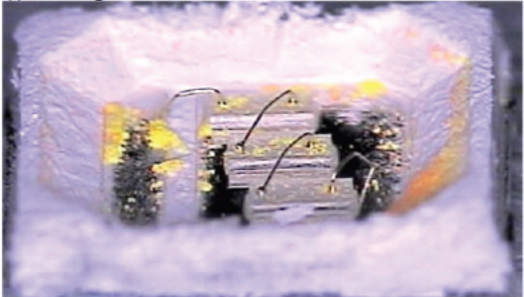
After a reasonable search, Bridgelux has located no non-privileged responsive documents in this category.

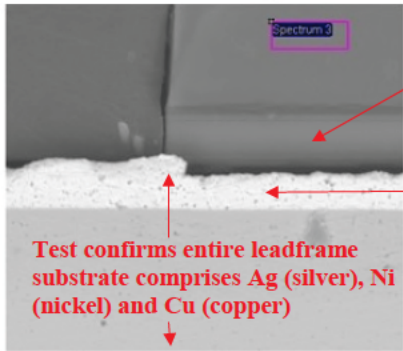
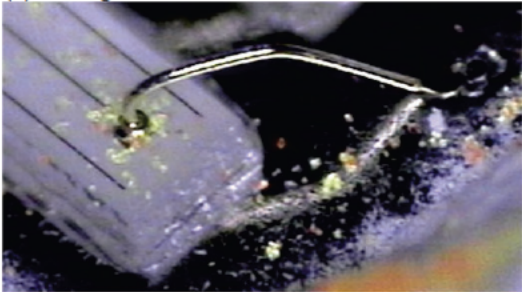
**APPENDIX A
TO BRIDGELUX, INC.'S
INFRINGEMENT CONTENTIONS**

NOTE: The Contentions herein for each dependent claim should be understood to incorporate by reference the contentions herein for the claim(s) from which it depends.

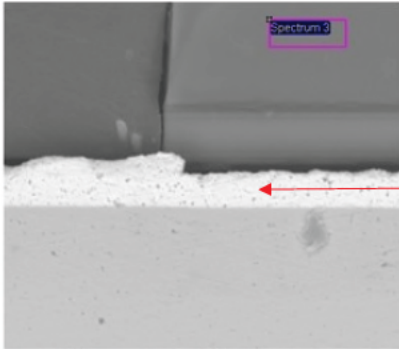
I. '988 PATENT

A. 2835 9V 1W 6500K

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 1. A light emitting diode (LED) apparatus comprising:	Everlight's 2835 9V 1W 6500K is an LED apparatus.
(i) a metal substrate having a (ii) reflective surface; and	(i) Everlight's 2835 9V 1W 6500K has a metal substrate. 

	Project: COMVCS07 Owner: supervisor Site: Site of Interest 1 EAG LABORATORIES  (ii) Everlight's 2835 9V 1W 6500K has a metal substrate that is reflective. 
(i) a plurality of LED chips (ii) mounted directly to the reflective surface of the metal substrate creating an efficient thermal path and	(i) Everlight's 2835 9V 1W 6500K has three chips.

(iii) at least a portion of the LED chips being spaced apart from each other to expose regions of the reflective surface between the portion of the LED chips, (iv) the exposed regions reflecting light emitted from the portion of the LED chips, and	 (ii) Everlight's 2835 9V 1W 6500K has chips that are mounted directly onto the reflective surface of the metal substrate, creating an efficient thermal path. (iii) Everlight's 2835 9V 1W 6500K has chips that are spaced apart exposing some of the reflective surface between the chips. (iv) Everlight's 2835 9V 1W 6500K has exposed regions that reflect light from the LED chips.
an electrical path formed by connecting the LED chips in a chip to chip fashion.	Everlight's 2835 9V 1W 6500K has electrical contacts on top of each chip that connects to the next-adjacent chip. 

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 3. The apparatus of claim 1, wherein the reflective surface comprises silver plating.	The reflective surface of Everlight's 2835 9V 1W 6500K comprises silver plating. Project: COHEY007 Owner: supervisor Site: Site of Interest 1 EAG LABORATORIES  ← EAG Labs test confirms that reflective surface is Ag (silver)

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 6. The apparatus of claim 1, wherein the plurality of LED chips provide separate thermal and electrical paths.	A plurality of LED chips in Everlight's 2835 9V 1W 6500K provide separate thermal and electrical paths.

B. XUAN 1313 8W

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 1. A light emitting diode (LED) apparatus comprising:	Everlight's XUAN 1313 8W is an LED apparatus.
(i) a metal substrate having a (ii) reflective surface; and	(i) Everlight's XUAN 1313 8W has a metal substrate.



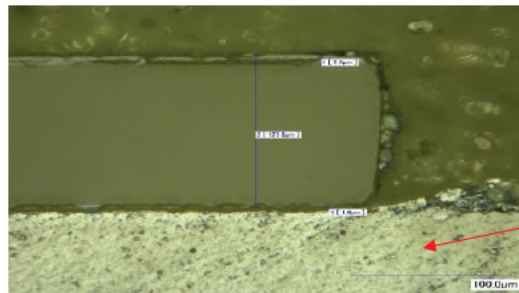
XUAN 1313 烜

36V/8W series

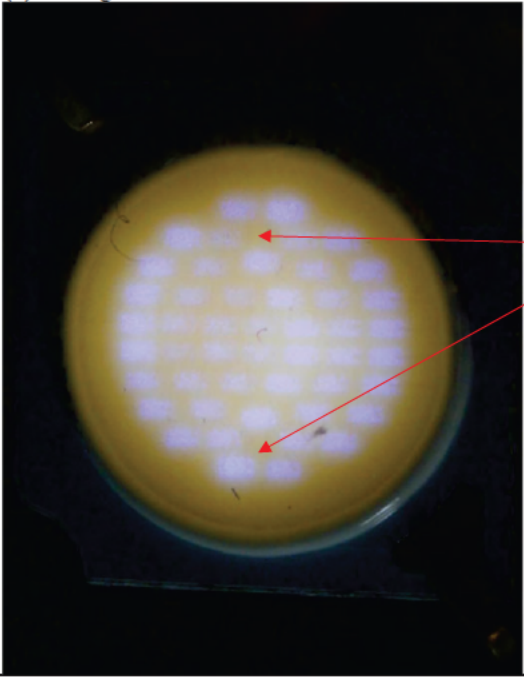


Introduction

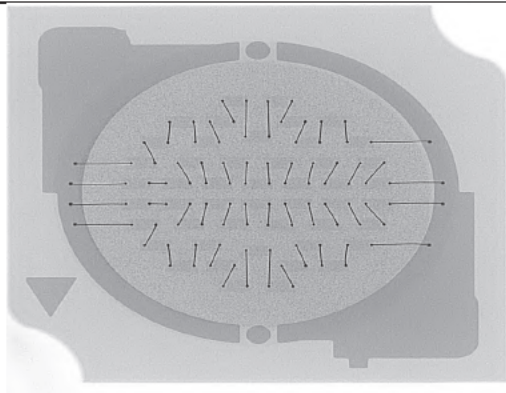
Everlight's COB Series is an aluminum substrate based LED achieving high efficiency while maintaining high CRI at Energy Star / ANSI color temperature ranges.



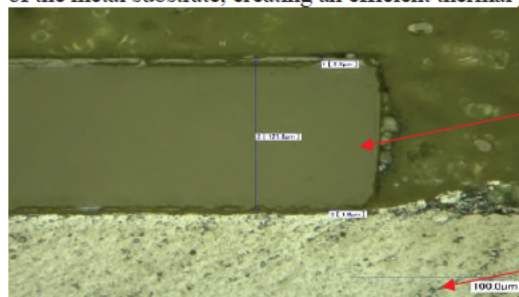
Cross-section shows metal substrate

	(ii) Everlight's XUAN 1313 8W has a metal substrate that is reflective.  Examples of the area between the LED chips is illuminated because the surface between the LED chips is reflective.
(i) a plurality of LED chips (ii) mounted directly to the reflective surface of the metal substrate creating an efficient thermal path and (iii) at least a portion of the LED chips being spaced apart from each other to expose regions of the reflective surface between the	(i) Everlight's XUAN 1313 8W has more than one chip.

portion of the LED chips, (iv) the exposed regions reflecting light emitted from the portion of the LED chips, and



(ii) Everlight's XUAN 1313 8W has chips that are mounted directly onto the reflective surface of the metal substrate, creating an efficient thermal path.



LED chip

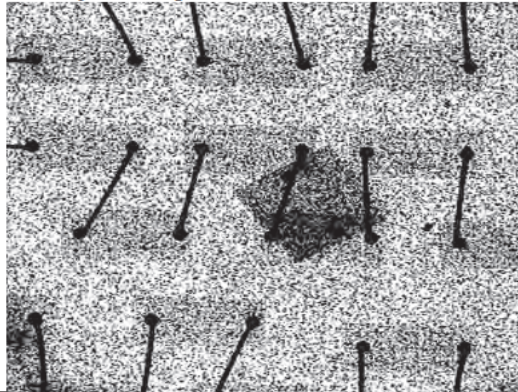
Metal substrate

(iii) Everlight's XUAN 1313 8W has chips that are spaced apart exposing some of the reflective surface between the chips.

(iv) Everlight's XUAN 1313 8W has exposed regions that reflect light from the LED chips.

an electrical path formed by connecting the LED chips in a chip to chip fashion.

Everlight's XUAN 1313 8W has electrical contacts on top of each chip that connects to the next-adjacent chip.

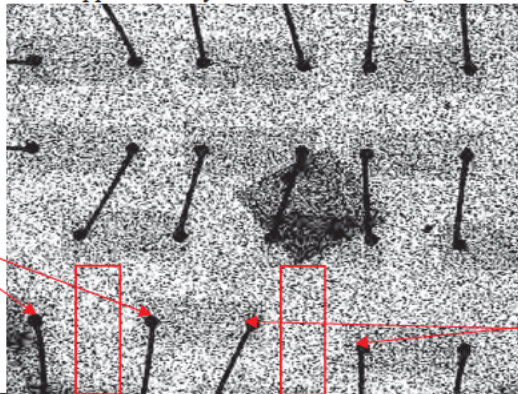


Claim

Claim 5. The apparatus of claim 1, wherein the at least a portion of the LED chips form an array having a chip spacing that is approximately 0.5 millimeters or greater.

Responsive Contentions Pursuant to Patent Local Rule 3-1(c)

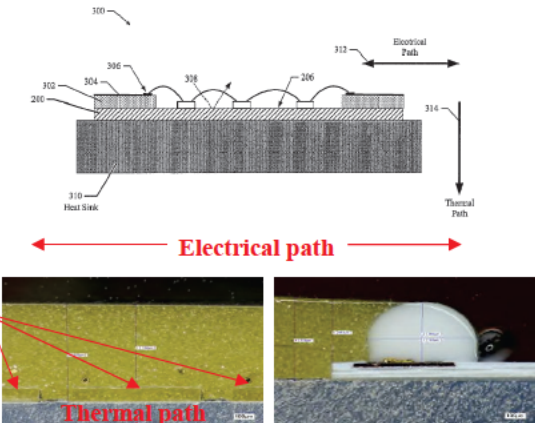
A plurality of LED chips in Everlight's XUAN 1313 8W form an array having a chip spacing that is approximately 0.5 millimeters or greater.

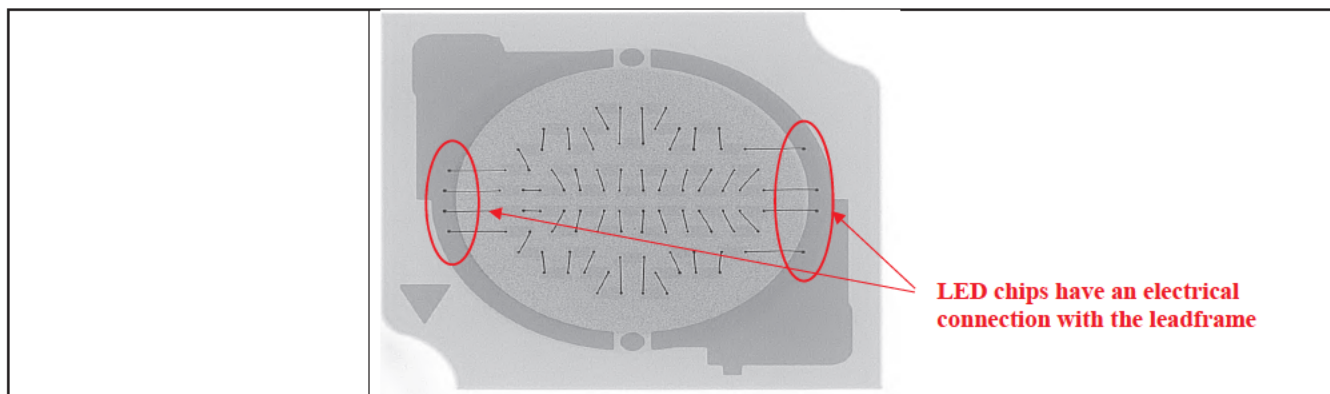


represents one chip
with dimensions 1.025
mm x .49 mm

Spacing is greater than
.5 mm between chips

Spacing is greater than
.5 mm between chips

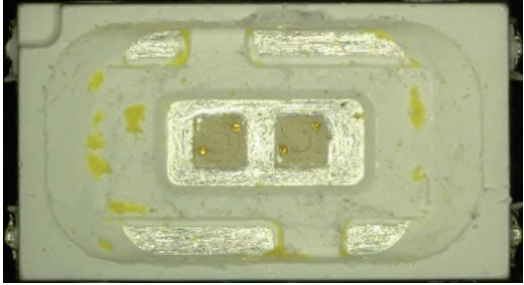
Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 6. The apparatus of claim 1, wherein the plurality of LED chips provide separate thermal and electrical paths.	A plurality of LED chips in Everlight's XUAN 1313 8W provide separate thermal and electrical paths.  LED chips Thermal path
Claim 9. The apparatus of claim 1, wherein the electrical path formed by connecting the LED chips in a chip to chip fashion does not include an electrical connection between the LED chips and the reflective surface.	The electrical path in Everlight's XUAN 1313 8W does not include an electrical connection between the LED chips and the reflective surface. The LED chips have an electrical connection with the leadframe. There is no electrical connection with the reflective surface.

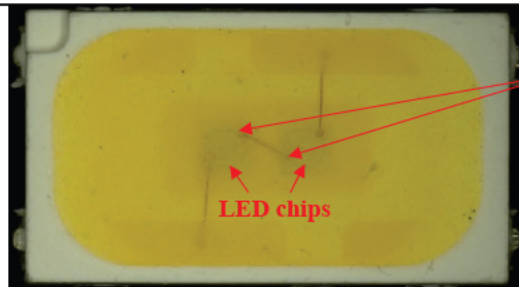


C. **KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T**

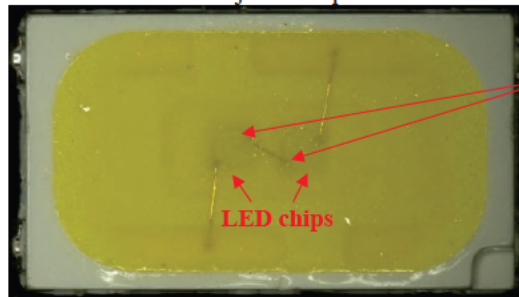
Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T products each have the same form factor. Therefore, the chart identifying specifically where and how each limitation of each asserted claim is found within Everlight's KK2C-N4040N4P3S2Z6/2T product is the same as the charts for Everlight's LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T products. Accordingly, one chart has been prepared for Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T products.

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 1. A light emitting diode (LED) apparatus comprising:	Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T are each an LED apparatus.
(i) a metal substrate having a	(i) Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T each have a metal substrate.
(ii) reflective surface; and	

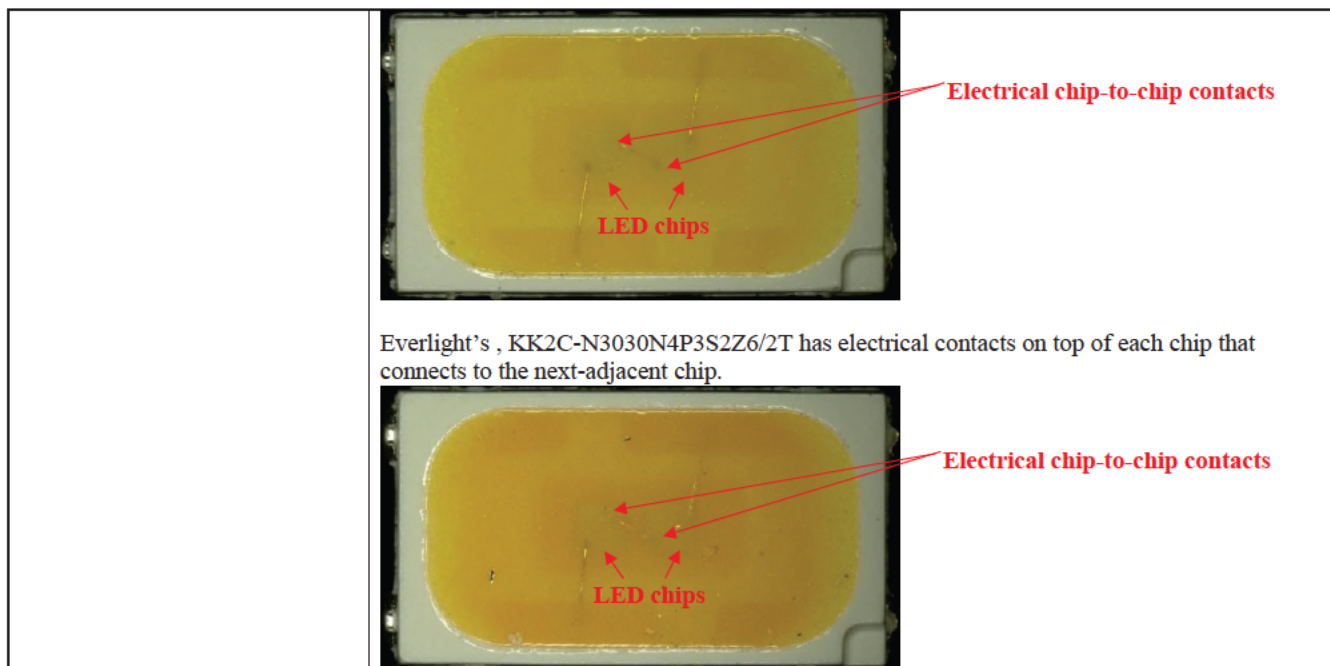
	 (ii) Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T each have a metal substrate that has a reflective surface.
(i) a plurality of LED chips (ii) mounted directly to the reflective surface of the metal substrate creating an efficient thermal path and (iii) at least a portion of the LED chips being spaced apart from each other to expose regions of the reflective surface between the portion of the LED chips, (iv) the exposed regions reflecting light emitted from the portion of the LED chips, and	(i) Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T each have two chips. (ii) Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T each have chips that are mounted directly onto the reflective surface of the metal substrate, creating an efficient thermal path. (iii) Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T each have chips that are spaced apart exposing some of the reflective surface between the chips. (iv) Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T each have exposed regions that reflect light from the LED chips.
an electrical path formed by connecting the LED chips in a chip to chip fashion.	Everlight's KK2C-N4040N4P3S2Z6/2T has electrical contacts on top of each chip that connects to the next-adjacent chip.



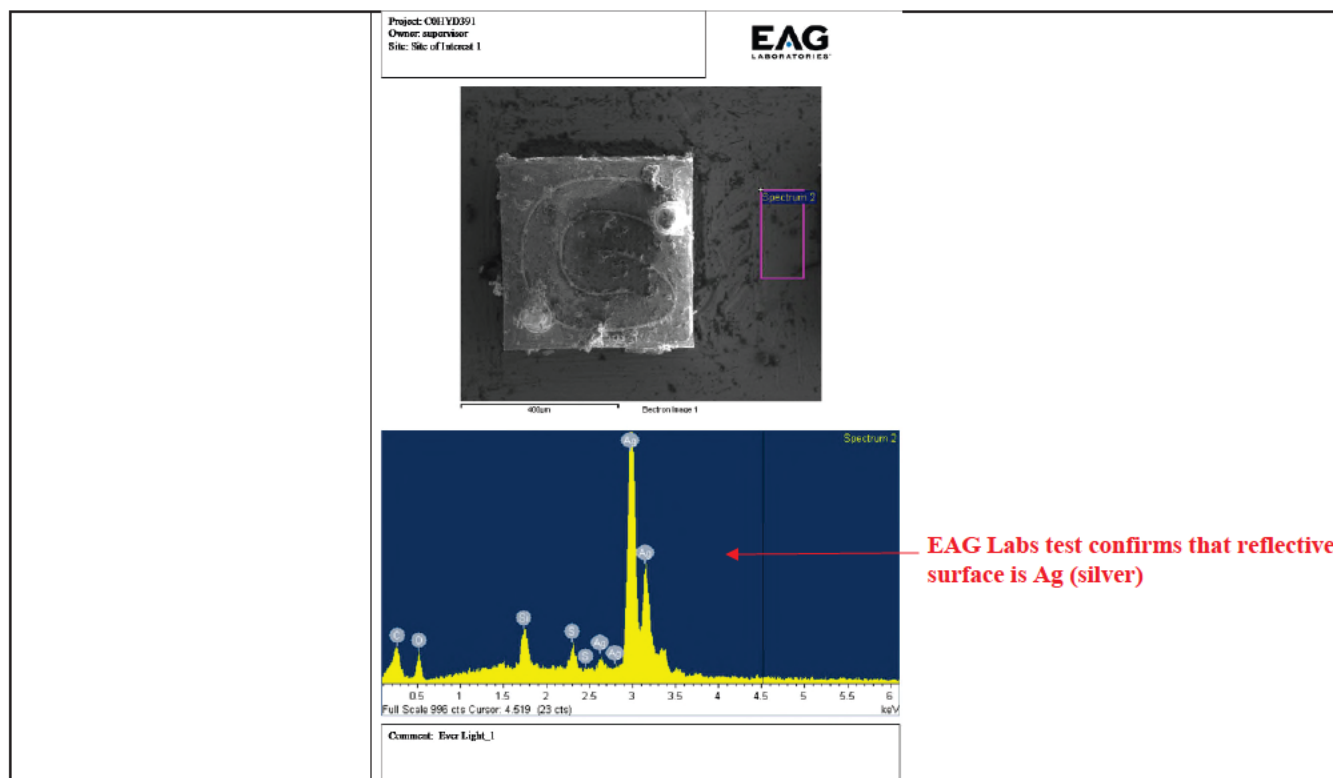
Everlight's LK2C-N4040N4P3S2Z6/2T has electrical contacts on top of each chip that connects to the next-adjacent chip.

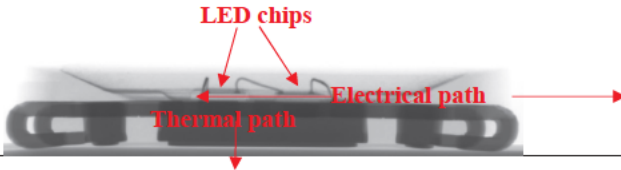
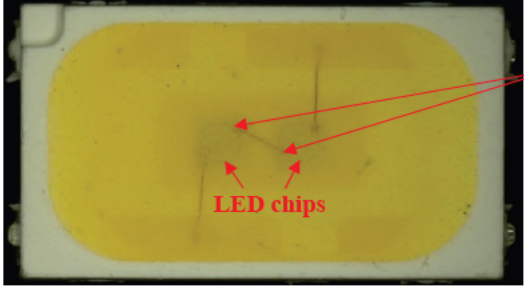


Everlight's LK2C-N3030N4P3S2Z6/2T has electrical contacts on top of each chip that connects to the next-adjacent chip.



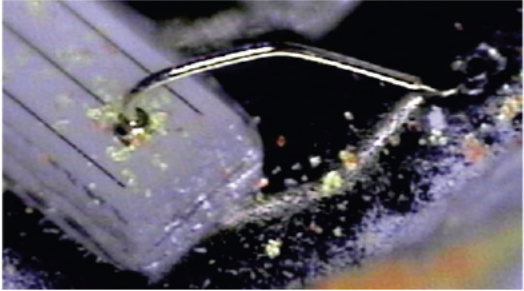
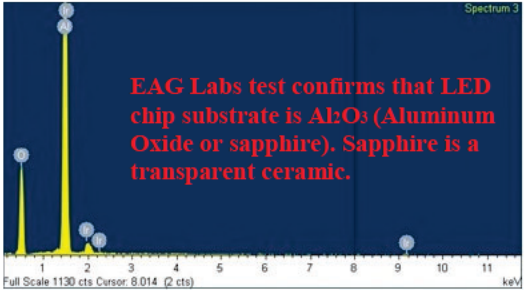
Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 3. The apparatus of claim 1, wherein the reflective surface comprises silver plating.	The reflective surface of each of Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T comprises silver plating.

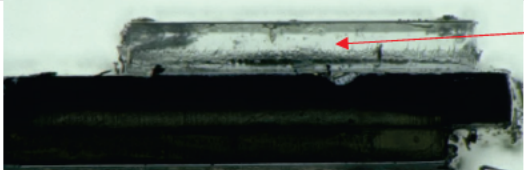
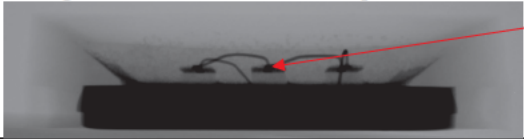
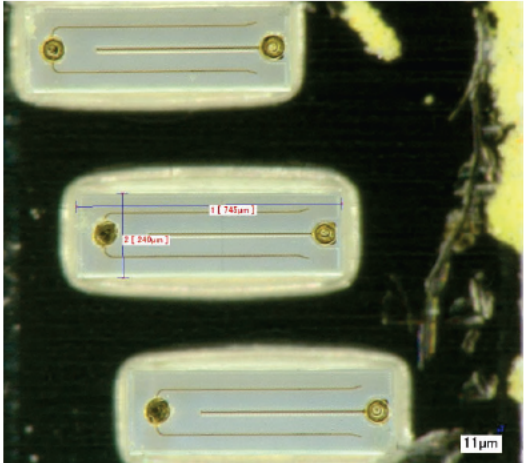


Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 6. The apparatus of claim 1, wherein the plurality of LED chips provide separate thermal and electrical paths.	A plurality of LED chips in each of Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T provide separate thermal and electrical paths. 
Claim 9. The apparatus of claim 1, wherein the electrical path formed by connecting the LED chips in a chip to chip fashion does not include an electrical connection between the LED chips and the reflective surface.	The electrical path in each of Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T does not include an electrical connection between the LED chips and the reflective surface. The LED chips have an electrical connection with the leadframe. There is no electrical connection with the reflective surface. For example, Everlight's KK2C-N4040N4P3S2Z6/2T has electrical contacts on top of each chip that connects to the next-adjacent chip.  Everlight's LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T have the same electrical path as Everlight's KK2C-N4040N4P3S2Z6/2T.

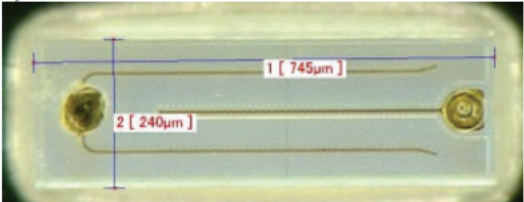
II. '812 PATENT

A. 2835 9V 1W 6500K

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 1. A light emitting diode chip comprising: a substantially transparent substrate;	Everlight's 2835 9V 1W 6500K has a LED chip. Everlight's 2835 9V 1W 6500K LED chip has a substrate is substantially transparent.  

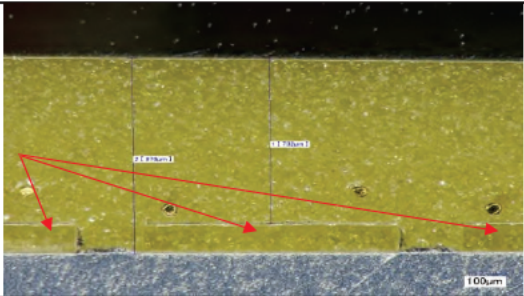
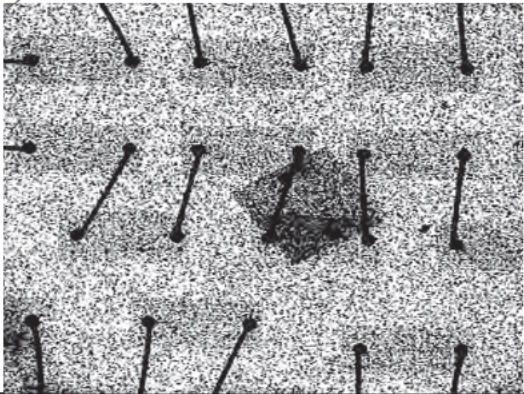
	 Light projecting through the substrate shows it is transparent.
an active region formed upon the substrate; and	The light emission occurs on the chip's substrate.  Active area on substrate.
wherein an aspect ratio of the active area is greater than approximately 1.5 to 1.	The aspect ratio of active area for Everlight's 2835 9V 1W 6500K is greater than 1.5 to 1 (3.1 to 1). 

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 2. The device as recited in claim 1, wherein the aspect ratio of the active area is greater than approximately 2 to 1.	The aspect ratio of active area for Everlight's 2835 9V 1W 6500K is greater than 2 to 1 (3.1 to 1).

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 3. The device as recited in claim 1, wherein the aspect ratio of the active area is between approximately 1.5 to 1 and approximately 10 to 1.	The aspect ratio of active area for Everlight's 2835 9V 1W 6500K is greater than 2 to 1 (3.1 to 1) and less than 10 to 1. 

B. XUAN 1313 8W

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 1. A light emitting diode chip comprising:	Everlight's XUAN 1313 8W has a LED chip.
a substantially transparent substrate;	Everlight's XUAN 1313 8W LED chip has a substrate is substantially transparent. The LED chips appear to be the same color as the phosphor behind/around them because the substrates are transparent.

LED chips		
an active region formed upon the substrate; and	The light emission occurs on the chip's substrate.	
wherein an aspect ratio of the active area is greater than approximately 1.5 to 1.	The aspect ratio of active area for Everlight's XUAN 1313 8W is greater than 1.5 to 1 (2.02 to 1). 	
Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)	
Claim 2. The device as recited in claim 1, wherein the aspect ratio	The aspect ratio of active area for Everlight's XUAN 1313 8W is greater than 2 to 1 (2.02 to 1).	

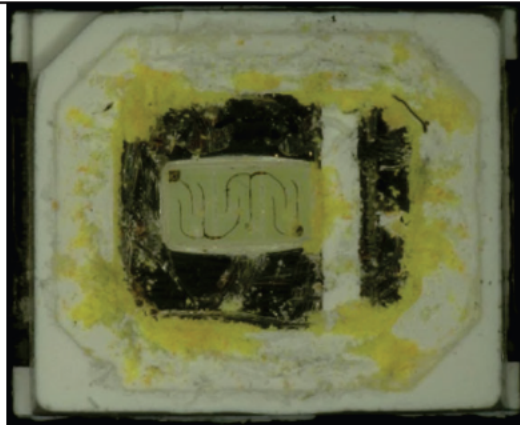
of the active area is greater than approximately 2 to 1.	
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Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 3. The device as recited in claim 1, wherein the aspect ratio of the active area is between approximately 1.5 to 1 and approximately 10 to 1.	The aspect ratio of active area for Everlight's XUAN 1313 8W is greater than 2 to 1 (2.02 to 1) and less than 10 to 1.

C. KK2C-H3030 and KK2C-H4040

Everlight's KK2C-H3030 and KK2C-H4040 products each have the same form factor. Therefore, the chart identifying specifically where and how each limitation of each asserted claim is found within Everlight's KK2C-H3030 product is the same as the chart for Everlight's KK2C-H4040 product. Accordingly, one chart has been prepared for Everlight's KK2C-H3030 and KK2C-H4040 products.

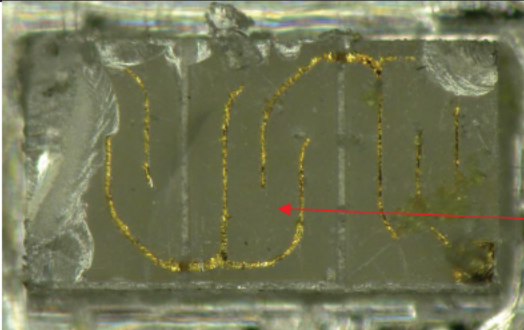
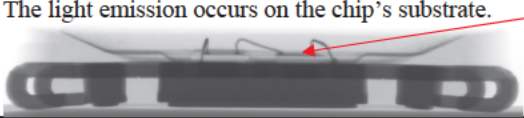
Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 1. A light emitting diode chip comprising:	Everlight's KK2C-H3030 and KK2C-H4040 each have a LED chip.
a substantially transparent substrate;	Everlight's KK2C-H3030 and KK2C-H4040 LED chips each have a substrate is substantially transparent.

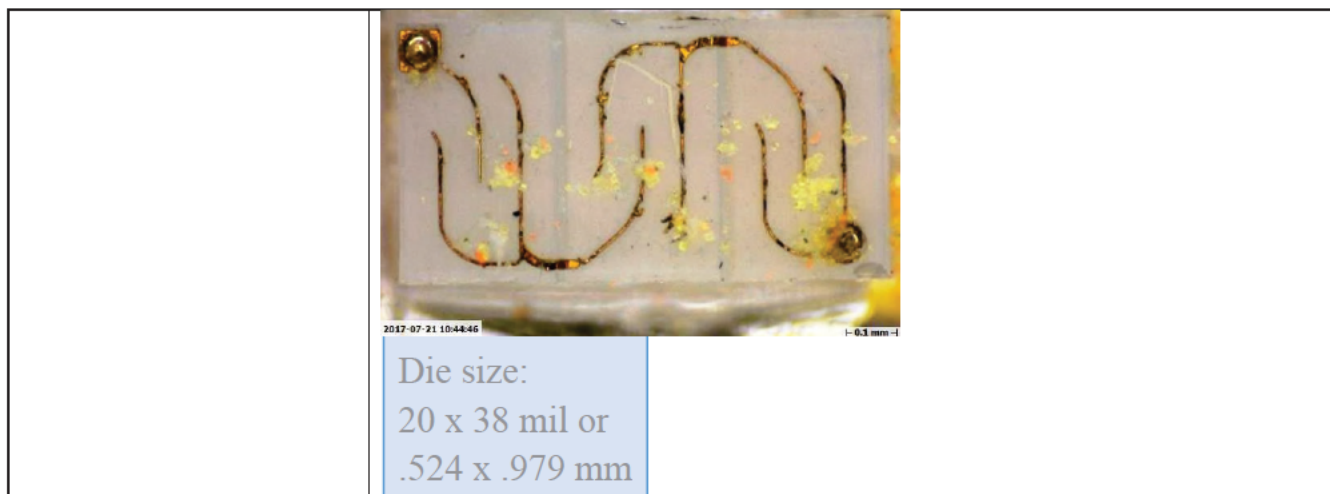


**X-ray image shows
substrate is transparent**



**Light shines through
substrate showing it is
transparent**

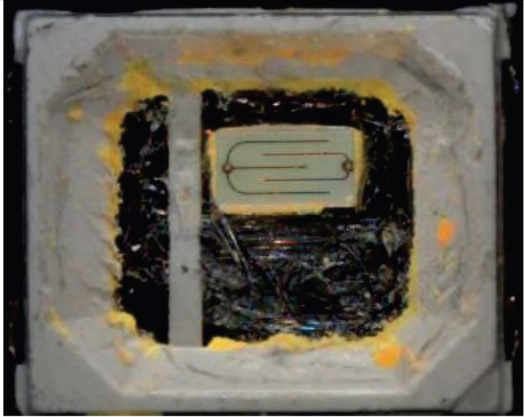
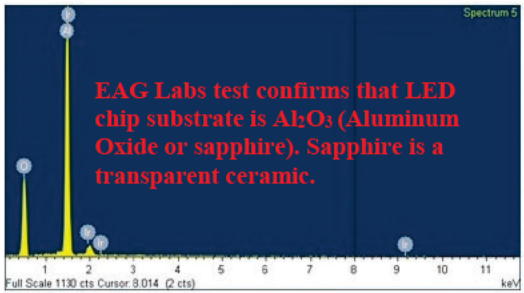
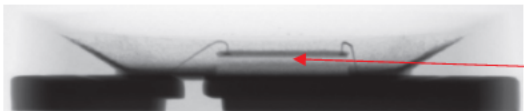
	 Alternate view showing substrate is transparent	
an active region formed upon the substrate; and	The light emission occurs on the chip's substrate.  Active area on substrate	
wherein an aspect ratio of the active area is greater than approximately 1.5 to 1.	The aspect ratio of active area for Everlight's KK2C-H3030 and KK2C-H4040 are each greater than 1.5 to 1 (1.86 to 1).	

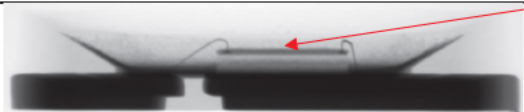


D. EAHE2835WD03, EAHE2835WD4, EAHE2835WD6, EAHE2835WD13, and EAHE2835WD33

Everlight's EAHE2835WD03, EAHE2835WD4, EAHE2835WD6, EAHE2835WD13, and EAHE2835WD33 products each have the same form factor. Therefore, the chart identifying specifically where and how each limitation of each asserted claim is found within Everlight's EAHE2835WD13 product is the same as the chart for Everlight's EAHE2835WD33 product. Accordingly, one chart has been prepared for Everlight's EAHE2835WD13 and EAHE2835WD33 products.

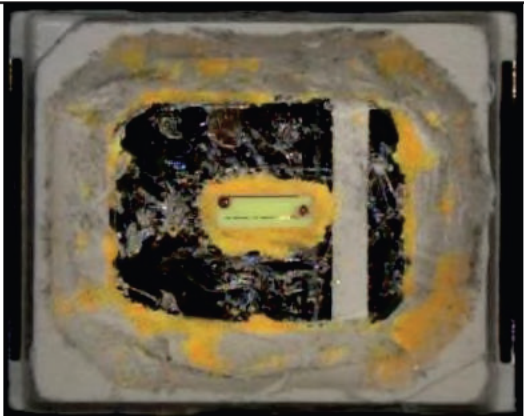
Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 1. A light emitting diode chip comprising:	Everlight's EAHE2835WD03, EAHE2835WD4, EAHE2835WD6, EAHE2835WD13, and EAHE2835WD33 each have a LED chip.
a substantially transparent substrate;	Everlight's EAHE2835WD03, EAHE2835WD4, EAHE2835WD6, EAHE2835WD13, and EAHE2835WD33 LED chips each have a substrate is substantially transparent.

	  EAG Labs test confirms that LED chip substrate is Al_2O_3 (Aluminum Oxide or sapphire). Sapphire is a transparent ceramic.  X-ray image shows substrate is transparent
an active region formed upon the substrate; and	The light emission occurs on the chip's substrate.

	 Active area on substrate
wherein an aspect ratio of the active area is greater than approximately 1.5 to 1.	The aspect ratio of active area for Everlight's EAHE2835WD03, EAHE2835WD4, EAHE2835WD6, EAHE2835WD13, and EAHE2835WD33 are each greater than 1.5 to 1 (1.89 to 1).  Die size are the same 20x37 mil or .499x.947 mm

E. 67-21S/KK2C-H3030M31N42936Z6/2T

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 1. A light emitting diode chip comprising:	Everlight's 67-21S/KK2C-H3030M31N42936Z6/2T has a LED chip.
a substantially transparent substrate;	Everlight's 67-21S/KK2C-H3030M31N42936Z6/2T ED chip has a substrate is substantially transparent.

		
an active region formed upon the substrate; and	 X-ray image shows substrate is transparent	
wherein an aspect ratio of the active area is greater than approximately 1.5 to 1.	 Active area on substrate	The light emission occurs on the chip's substrate. The aspect ratio of active area for Everlight's 67-21S/KK2C-H3030M31N42936Z6/2T is greater than 1.5 to 1 (3.0 to 1).

	 Die size 9x26 mil or .226x.680	
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Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 2. The device as recited in claim 1, wherein the aspect ratio of the active area is greater than approximately 2 to 1.	The aspect ratio of active area for Everlight's 67-21S/KK2C-H3030M31N42936Z6/2T is greater than 2 to 1 (3.0 to 1).

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 3. The device as recited in claim 1, wherein the aspect ratio of the active area is between approximately 1.5 to 1 and approximately 10 to 1.	The aspect ratio of active area for Everlight's 67-21S/KK2C-H3030M31N42936Z6/2T is greater than 2 to 1 (3.0 to 1) and less than 10 to 1.

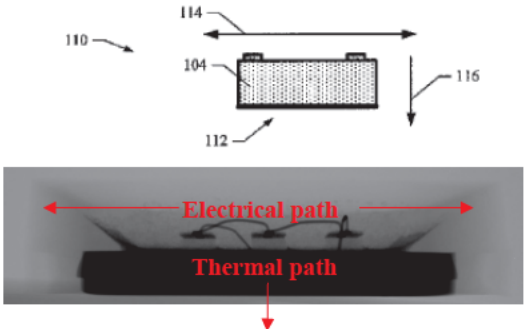
III. '929 PATENT

A. 2835 9V 1W 6500K

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 1. A method for forming a light emitting diode (LED) apparatus, the method comprising:	Everlight's 2835 9V 1W 6500K is formed by the method of claim 1.
configuring a metal substrate to have a reflective surface; and	Everlight's 2835 9V 1W 6500K is formed by configuring a metal substrate with a reflective surface.
(i) mounting a plurality of LED chips directly to the reflective surface of the metal substrate to allow for thermal dissipation, and (ii) wherein at least a portion of the LED chips are spaced apart from each other sufficiently to allow light to reflect from a portion of the reflective surface that is located between the portion of the LED chips.	(i) Everlight's 2835 9V 1W 6500K is formed by mounting LED chips directly to the reflective surface. (ii) A portion of Everlight's 2835 9V 1W 6500K's LED chips are spaced apart from each other sufficiently to allow light to reflect from the reflective surface.

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 3. The method of claim 1, wherein said configuring comprises configuring the reflective surface to comprise silver plating.	The reflective surface of Everlight's 2835 9V 1W 6500K is configured to comprise silver plating.

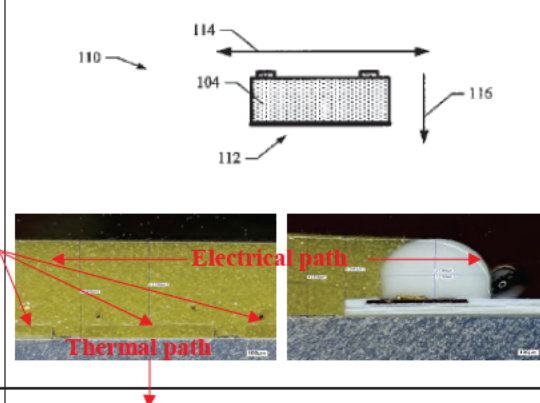


Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 5. The method of claim 1, further comprising configuring the plurality of LED chips to provide separate thermal and electrical paths.	A plurality of LED chips in Everlight's 2835 9V 1W 6500K are configured to provide separate thermal and electrical paths. 

B. XUAN 1313 8W

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 1. A method for forming a light emitting diode (LED) apparatus, the method comprising:	Everlight's XUAN 1313 8W is formed by the method of claim 1.
configuring a metal substrate to have a reflective surface; and	Everlight's XUAN 1313 8W is formed by configuring a metal substrate with a reflective surface.
(i) mounting a plurality of LED chips directly to the reflective surface of the metal substrate to allow for thermal dissipation, and (ii) wherein at least a portion of the LED chips are spaced apart	(i) Everlight's XUAN 1313 8W is formed by mounting LED chips directly to the reflective surface. (ii) A portion of Everlight's XUAN 1313 8W's LED chips are spaced apart from each other sufficiently to allow light to reflect from the reflective surface.

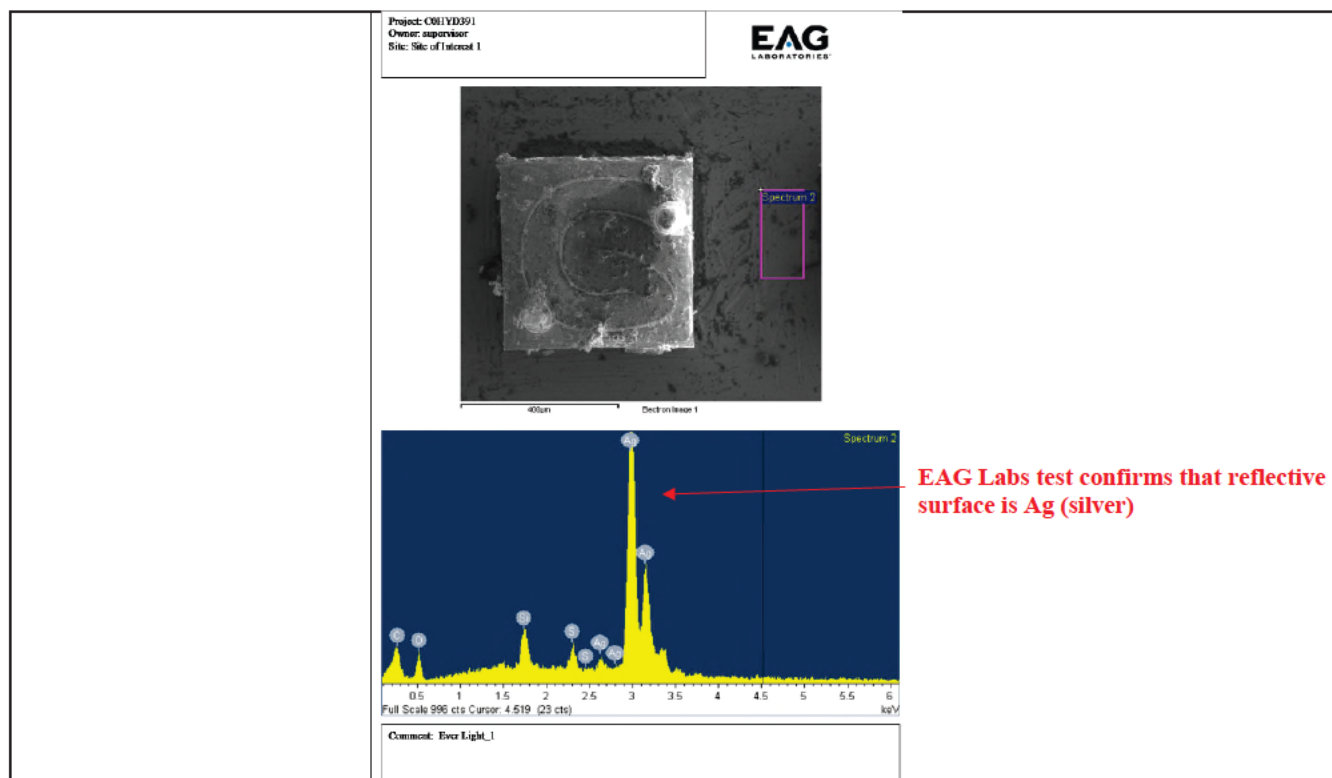
from each other sufficiently to allow light to reflect from a portion of the reflective surface that is located between the portion of the LED chips.	
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Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 5. The method of claim 1, further comprising configuring the plurality of LED chips to provide separate thermal and electrical paths.	A plurality of LED chips in Everlight's XUAN 1313 8W are configured to provide separate thermal and electrical paths.  The diagram shows a top-down view of an LED chip array 110. It includes a central chip area 104, a top edge 114, a bottom edge 112, and a right side 116. Below the diagram are two micrographs. The left micrograph shows the chip surface with red arrows indicating 'Electrical path' and 'Thermal path'. The right micrograph shows the chip mounted on a substrate with a red arrow indicating the 'Thermal path'.

C. KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 1. A method for forming a light emitting diode (LED)	Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T are each formed by the method of claim 1.

apparatus, the method comprising:	
configuring a metal substrate to have a reflective surface; and	Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T are each formed by configuring a metal substrate with a reflective surface.
(i) mounting a plurality of LED chips directly to the reflective surface of the metal substrate to allow for thermal dissipation, and (ii) wherein at least a portion of the LED chips are spaced apart from each other sufficiently to allow light to reflect from a portion of the reflective surface that is located between the portion of the LED chips.	(i) Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T are each formed by mounting LED chips directly to the reflective surface. (ii) A portion of each of Everlight's KK2C-N4040N4P3S2Z6/2T's, LK2C-N4040N4P3S2Z6/2T's, LK2C-N3030N4P3S2Z6/2T's, and KK2C-N3030N4P3S2Z6/2T's LED chips are spaced apart from each other sufficiently to allow light to reflect from the reflective surface.
Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 3. The method of claim 1, wherein said configuring comprises configuring the reflective surface to comprise silver plating.	The reflective surface of each of Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T is configured to comprise silver plating.



Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 5. The method of claim 1, further comprising configuring the plurality of LED chips to provide separate thermal and electrical paths.	A plurality of LED chips in each of Everlight's KK2C-N4040N4P3S2Z6/2T, LK2C-N4040N4P3S2Z6/2T, LK2C-N3030N4P3S2Z6/2T, and KK2C-N3030N4P3S2Z6/2T are configured to provide separate thermal and electrical paths.

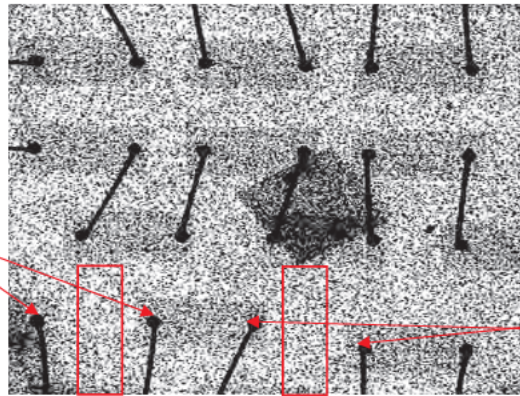
IV. '051 PATENT

A. XUAN 1313 8W

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 1. A method for forming a light emitting diode (LED) apparatus, the method comprising:	Everlight's XUAN 1313 8W is formed by the method of claim 1.
configuring a metal substrate to have a reflective surface; and	Everlight's XUAN 1313 8W is formed by configuring a metal substrate with a reflective surface.
(i) mounting a plurality of LED chips directly to the reflective surface of the metal substrate to allow for thermal dissipation, and	(i) Everlight's XUAN 1313 8W is formed by mounting LED chips directly to the reflective surface.
(ii) wherein at least a portion of	(ii) A portion of Everlight's XUAN 1313 8W's LED chips are spaced apart at least 0.5 millimeters to allow light to reflect from the reflective surface.

the LED chips are spaced apart from each other to define an array having a chip spacing of at least 0.5 millimeters to allow light to reflect from a portion of the reflective surface that is located between the portion of the LED chips.

Spacing is greater than .5 mm between chips



**represents one chip
with dimensions 1.025
mm x .49 mm**

**Spacing is greater than
.5 mm between chips**

Claim	Responsive Contentions Pursuant to Patent Local Rule 3-1(c)
Claim 5. The method of claim 1, further comprising configuring the plurality of LED chips to provide separate thermal and electrical paths.	A plurality of LED chips in Everlight's XUAN 1313 8W are configured to provide separate thermal and electrical paths. FIG. 1