IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

IDEAL INDUSTRIES LIGHTING LLC D/B/A CREE LIGHTING. *Plaintiff*, v. RAB LIGHTING INC. *Defendant*.	**Case No. 1:20-cv-05424** **Jury Trial Demanded** **COMPLAINT**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff IDEAL INDUSTRIES LIGHTING LLC d/b/a Cree Lighting (hereinafter "Cree Lighting"), for its Complaint against Defendant RAB Lighting Inc. (hereinafter "RAB Lighting"), alleges as follows:

THE PARTIES

1. Plaintiff Cree Lighting is a corporation organized and existing pursuant to the laws of the State of Delaware, with a principal place of business at 4401 Silicon Drive, Durham, North Carolina 27703.

2. Defendant RAB Lighting is a privately held company incorporated in the State of New York. It has its principal place of business at 170 Ludlow Ave, Northvale, NJ 07647.

JURISDICTION AND VENUE

3. This lawsuit is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1 et seq.

4. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

5. This Court has personal jurisdiction over RAB Lighting because RAB Lighting is incorporated in the state of New York, in the County of New York.

6. Venue is proper in this judicial district under 28 U.S.C. § 1400(b) because RAB Lighting is incorporated in the county of New York within the state of New York, has a registered office for service of process at 122 East 42nd Street, 18th Floor, New York, New York, 10168, and has its principal place of business outside the state of New York. Venue is also proper in this judicial district under 28 U.S.C. § 1400(b) because RAB Lighting has a regular and established place of business within this judicial district, at 408 W. 14th St., 3rd floor, New York, NY, 10014, and has committed acts of infringement in this judicial district, including by *inter alia* using and selling infringing products within this judicial district.

BACKGROUND

7. Cree Lighting (including its predecessors) is a leader in the design and development of LED lighting fixtures, lamps and intelligent lighting control solutions for commercial, industrial and consumer applications. Based in Durham, North Carolina, with manufacturing in Racine, Wisconsin, Cree Lighting employs over a thousand individuals in the United States (including over 800 individuals in the Racine facility) and (with its predecessors) has made a substantial investment in domestic research, development, and manufacturing to bring revolutionary LED products and components thereof to market.

8. The current Cree Lighting is the combination of two businesses acquired, combined and further developed by Cree, Inc. ("Cree"): Ruud Lighting, Inc. ("Ruud") and LED Lighting Fixtures, Inc. ("LLF"). Ruud was the first company to launch commercially viable

outdoor LED lighting fixtures, THE EDGE® Series, in 2007 under the BetaLED brand name. Cree acquired Ruud in August 2011. LLF was the first company to launch commercially viable indoor LED lighting fixtures, the LR6 Series, in 2007. Cree acquired LLF in March 2008. With these acquisitions, Cree envisioned developing solutions for upgrading existing lighting infrastructure to energy-efficient lighting and accelerating the adoption of LED lighting. The LED fixture business was named Cree LED Lighting Solutions ("Cree LED Lighting") in 2011.

9. Cree LED Lighting achieved a series of breakthrough innovations and pioneered new markets for commercially successful LED lighting fixtures and intelligent controls.

10. For example in 2011, Cree LED Lighting introduced the CR Series LED Troffer, with Cree TrueWhite® Technology, offering improved color quality and longer life with viable economic payback.

11. In 2012, Cree LED Lighting introduced—and now has sold over a million units of—the XSP Series LED Street Light that uses 50% less energy and lasted three times longer than traditional high-pressure sodium street lighting.

12. In 2013, Cree LED Lighting introduced the first LED Light Bulb to provide high color quality in the same form factor with 70% energy savings, which lasted over 10 times longer than existing lamps. These lamps became one of the bestselling LED lamps at the largest consumer retailer of LED bulbs.

13. In 2013, Cree LED Lighting introduced the CPY250® Series Canopy/Soffit Luminaire used in petroleum canopies. With over 50% energy savings, and improved application lighting, this fixture grew to be the leading lighting product in the petroleum market.

14. In 2014, Cree LED Lighting introduced SmartCast®, a lighting control system that self-configures with a single push button operation during installation, increasing customer energy savings and convenience.

15. In 2015, Cree LED Lighting introduced new KR8 downlight and LN Series luminaire, featuring Cree WaveMax® Technology and Cree TrueWhite Technology that provide improved optical efficiency, beam control, and product life to offices, lobbies, theaters, airports, and auditoriums.

16. In 2016, Cree LED Lighting introduced the RSW Series streetlights, using new WaveMax™ optical technology to provide all the previous benefits of LED street lighting, with superior optical control for low glare, and with the familiar, and preferred comfortable warm color light.

17. In 2019, Cree LED Lighting introduced the Cadiant™ Dynamic Light Experience, which combined the expertise of human-centric luminaire design, color science and controls integration to provide an immersive dynamic skylight experience, while achieving the latest in recommended lighting quality standards, with the ease of use and system integration possible with the best technologies of modern intelligent controls systems.

18. In May 2019, Cree Lighting became a successor to the Cree LED Lighting business. Cree Lighting's focus on market leading LED lighting products and solutions continues post-acquisition.

19. On information and belief, RAB Lighting makes, uses, sells, offers to sell within, and/or imports into the United States LED products such as LED bulbs and LED fixtures for indoor and outdoor applications (the "Accused Products").

COUNT 1: INFRINGEMENT OF U.S. PATENT NO. 8,403,531

20. Cree Lighting re-alleges, adopts, and incorporates by reference the allegations contained in the foregoing paragraphs as if fully set forth herein.

21. Cree Lighting owns by assignment the right, title and interest in United States Patent No. 8,403,531 ("the '531 patent"), titled "Lighting Device and Method of Lighting," which issued on March 26, 2013, naming Gerald H. Negley, Antony Paul Van de Ven, Thomas G. Coleman, and Mark D. Edmond as co-inventors. A true and correct copy of the '531 patent is attached as Exhibit 1.

22. As the owner of the '531 patent, Cree Lighting is authorized and has standing to bring legal action to enforce all rights arising under the '531 patent.

23. The '531 patent generally relates to highly efficient LED lighting devices, such as bulbs and luminaires. Efficiency of LED-based lighting devices according to the '531 patent is measured in terms of brightness output (in lumens) per power input (in watts). The inventors of the '531 patent developed LED-based lighting devices capable of operating with a wall plug efficiency of at least 85 lumens per watt, an efficiency that prior-art devices were unable to achieve. Embodiments of the LED-based lighting devices disclosed in the '531 patent achieve this efficiency while producing light at commercially desirable color-temperature and color-rendering values.

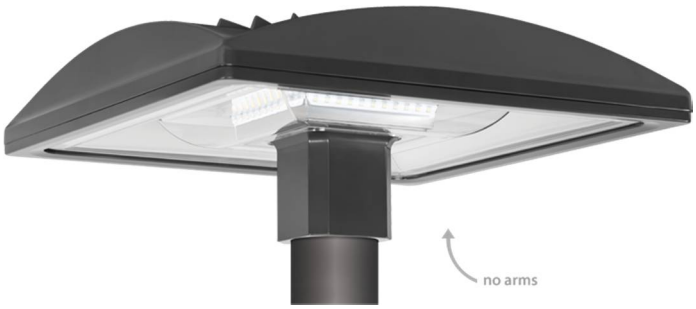
24. On information and belief, in violation of 35 U.S.C. § 271, RAB Lighting has infringed and is continuing to infringe, literally and/or under the doctrine of equivalents, one or more claims of the '531 patent through the manufacture, offering for sale, sale, and/or importation of LED products. On information and belief, RAB Lighting tests, demonstrates, or otherwise operates the Accused Products in the United States, thereby performing the claimed

methods and directly infringing any asserted claims of the ’531 patent requiring such operation. By way of example and without limitation, the RAB ALED5S, CANVAS, WPLED3T360/D10/WS10, and TRIBORO are each an infringing product. Cree Lighting reserves the right to contend that additional LED products manufactured, offered for sale, sold, and/or imported by RAB Lighting infringe the ’531 patent.

25. By way of example only, the Accused Products meet all the limitations of dependent claim 10 of the ’531 Patent for at least the following reasons.

26. The Accused Products are each a lighting device comprising at least one solid state light emitter.

ALED5S:



Ex. 6 (https://www.rablighting.com/search?search=ALED5S)

Specifications

UL Listing: Suitable for wet locations

LEDs: Long-life, high-efficiency surface mount LEDs

Ex. 7
(https://www.rablighting.com/sites/default/files/features/datasheets/aled5s_datasheet_0.pdf)

CANVAS

Ex. 8 (https://www.rablighting.com/feature/led-sign-billboard-light)

Specifications

UL Listing: Suitable for wet locations. Suitable for ground mounting.

LEDs: Multi-chip, high-output, long-life LEDs

Lifespan: 100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

Drivers: Constant current, Class 2, 120-277V, 50/60 Hz, 6 kV Surge Protection, 720mA, 100-277V: 0.4 A, THD <20%, Power Factor 99.2%

Ex. 9
(https://www.rablighting.com/sites/default/files/features/datasheets/canvas_datasheet_0.pdf)

WPLED3T360/D10/WS10

Ex. 10 (https://www.rablighting.com/product/WPLED3T360/D10/WS10)

Driver Info		LED Info	
Type	Constant Current	Watts	360W
120V	3.0A	Color Temp	5000K (Cool)
208V	1.8A	Color Accuracy	70 CRI
240V	1.5A	L70 Lifespan	100,000
277V	1.3A	Lumens	36,736
Input Watts	364.80W	Efficacy	100.7 lm/W

Id.

TRIBORO

Ex. 11 (https://www.rablighting.com/feature/led-roadway-lighting-triboro)

Specifications

UL Listing: Suitable for wet locations

IP Rating: Rated IP66. Completely dust tight and protected against powerful water jets.

Vibration Rating: Industry-leading 5G vibration rating per ANSI C136.31.

LEDs: Long-life, high-efficiency, surface mount LEDs

Lifespan: 100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

Ex. 12
(https://www.rablighting.com/sites/default/files/features/datasheets/triboro_datasheet_0.pdf)

27. When supplied with electricity of a first wattage, the Accused Products emit output light having a wall plug efficiency in the range of from at least 85 to about 113.5 lumens per watt of said electricity.

ALED5S:

5000K		
Nominal Watts @120V	78W	150W
Input Watts	72	150
Output Lumens	8368	14,288
Lumens Per Watt	117	95
Color Accuracy (CRI)	73	74
4000K		
Input Watts	72	148
Output Lumens	8183	13,860
Lumens Per Watt	114	94
Color Accuracy (CRI)	73	73
3000K		
Input Watts	72	149
Output Lumens	7575	12,744
Lumens Per Watt	105	86
Color Accuracy (CRI)	73	73

Ex. 7
(https://www.rablighting.com/sites/default/files/features/datasheets/aled5s_datasheet_0.pdf)

CANVAS

Correlated Color Temp. (CCT)	5000K	4000K	3000K
Input Watts @ 120VAC	89	90	91
Output Lumens	9784	10098	9656
Lumens per Watt	110	112	107
Color Accuracy (CRI)	71	71	70

Ex. 9 (https://www.rablighting.com/sites/default/files/features/datasheets/canvas_datasheet_0.pdf)

WPLED3T360/D10/WS10

Driver Info		LED Info	
Type	Constant Current	Watts	360W
120V	3.0A	Color Temp	5000K (Cool)
208V	1.8A	Color Accuracy	70 CRI
240V	1.5A	L70 Lifespan	100,000
277V	1.3A	Lumens	36,736
Input Watts	364.80W	Efficacy	100.7 lm/W

Ex. 10 (https://www.rablighting.com/product/WPLED3T360/D10/WS10)

TRIBORO

TRIBORO 32W

Color Temperature	5000K	4000K	3000K	2000K
Input Watts	32	32	32	32
Output Lumens	3743	3434	3303	2399
Lumens Per Watt	118	107	104	75
Color Accuracy (CRI)	73	72	71	70

TRIBORO 48W

Color Temperature	5000K	4000K	3000K	2000K
Input Watts	48	48	47	48
Output Lumens	5426	4978	4788	3478
Lumens Per Watt	114	104	101	73
Color Accuracy (CRI)	73	72	71	70

TRIBORO 64W

Color Temperature	5000K	4000K	3000K	2000K
Input Watts	67	68	67	67
Output Lumens	7354	6747	6490	4714
Lumens Per Watt	109	100	97	70
Color Accuracy (CRI)	73	72	71	70

TRIBORO 95W

Color Temperature	5000K	4000K	3000K	2000K
Input Watts	93	94	93	93
Output Lumens	10,955	10,051	9667	7022
Lumens Per Watt	118	107	104	76
Color Accuracy (CRI)	73	72	71	70

Performance shown for Type III only. Visit rabweb.com for performance of Types II and IV.

Ex. 12
(https://www.rablighting.com/sites/default/files/features/datasheets/triboro_datasheet_0.pdf)

28. On information and belief, RAB Lighting makes, uses, sells, offers to sell within, and/or imports into the United States these infringing products.

29. On information and belief, RAB Lighting also knowingly induces and/or contributes to the infringement of one or more claims of the ’531 patent by others. On information and belief, RAB Lighting has had knowledge of the ’531 patent, and its infringement of the ’531 patent, since at least the filing date of this Complaint. On information and belief, RAB Lighting’s customers and the end users of the Accused Products test and/or

operate the Accused Products in the United States in accordance with RAB Lighting's instructions contained in, for example, its user manuals, thereby also performing the claimed methods and directly infringing the asserted claims of the '531 patent requiring such operation.

30. RAB Lighting also contributes to infringement of the '531 patent by selling for importation into the United States, importing into the United States, and/or selling within the United States after importation the Accused Products and the non-staple constituent parts of the Accused Products, which are not suitable for substantial non-infringing use and which embody a material part of the inventions of the asserted claims of the '531 patent. On information and belief, these products are known by RAB Lighting to be especially made or especially adapted for use in the infringement of the '531 patent. End users of those products in the United Statements also directly infringe the '531 patent.

31. As a result of RAB Lighting's infringement of the '531 patent, Cree Lighting has suffered and will continue to suffer substantial damages.

32. Cree Lighting is entitled to recover from RAB Lighting the damages sustained as a result of RAB Lighting's infringing acts in an amount to be determined at trial.

33. Upon information and belief, RAB Lighting's acts of infringement of the '531 patent will continue after service of this Complaint unless enjoined by the Court. Thus, unless RAB Lighting is enjoined by this Court from continuing their infringement of the '531 patent, Cree Lighting will suffer additional irreparable harm and impairment of the value of its patent rights. Cree Lighting has no adequate remedy at law for these wrongs and injuries. Thus, Cree Lighting is entitled to a permanent injunction against further infringement.

COUNT 2: INFRINGEMENT OF U.S. PATENT NO. 8,596,819

34. Cree Lighting re-alleges, adopts, and incorporates by reference the allegations contained in the foregoing paragraphs as if fully set forth herein.

35. Cree Lighting owns by assignment the right, title and interest in United States Patent No. 8,596,819 ("the '819 patent"), titled "Lighting Device and Method of Lighting," which issued on December 3, 2013, naming Gerald H. Negley, Antony Paul Van de Ven, and Thomas G. Coleman as co-inventors. A true and correct copy of the '819 patent is attached as Exhibit 2.

36. As the owner of the '819 patent, Cree Lighting is authorized and has standing to bring legal action to enforce all rights arising under the '819 patent.

37. The '819 patent generally relates to highly efficient LED lighting devices, such as bulbs and luminaires. Efficiency of LED-based lighting devices according to the '819 patent is measured in terms of brightness output (in lumens) per power input (in watts). The inventors of the '819 patent developed LED-based lighting devices capable of operating with a wall plug efficiency of at least 60 lumens per watt, an efficiency that prior-art devices were unable to achieve. Embodiments of the LED-based lighting devices disclosed in the '819 patent achieve this efficiency while producing light at commercially desirable color-temperature and color-rendering values.

38. On information and belief, in violation of 35 U.S.C. § 271, RAB Lighting has infringed and is continuing to infringe, literally and/or under the doctrine of equivalents, one or more claims of the '819 patent through the manufacture, offering for sale, sale, and/or importation of LED products. On information and belief, RAB Lighting tests, demonstrates, or otherwise operates the Accused Products in the United States, thereby performing the claimed

methods and directly infringing any asserted claims of the '819 patent requiring such operation. By way of example and without limitation, the RAB EZLED, MR16-7.5-940-25D-DIM-G2, and TRIBORO are each an infringing product. Cree Lighting reserves the right to contend that additional LED products manufactured, offered for sale, sold, and/or imported by RAB Lighting infringe the '819 patent.

39. By way of example only, the Accused Products meet all the limitations of dependent claim 26 of the '819 Patent for at least the following reasons.

40. The Accused Products are each a lighting device comprising at least one light emitting diode.

EZLED:

Ex. 13 (https://www.rablighting.com/feature/78-watt-led-spotlight)

Specifications

UL Listing: Suitable for wet locations. Suitable for mounting within 4 ft. of the ground.

LEDs: Multi-chip, high-output, long-life LEDs

Ex. 14 (https://www.rablighting.com/sites/default/files/features/datasheets/ezled_datasheet_0.pdf)

MR16-7.5-940-25D-DIM-G2

Ex. 15 (https://www.rablighting.com/product/MR16-7.5-940-25D-DIM-G2)

TRIBORO

Ex. 11 (https://www.rablighting.com/feature/led-roadway-lighting-triboro)

Specifications

UL Listing: Suitable for wet locations

IP Rating: Rated IP66. Completely dust tight and protected against powerful water jets.

Vibration Rating: Industry-leading 5G vibration rating per ANSI C136.31.

LEDs: Long-life, high-efficiency, surface mount LEDs

Lifespan: 100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

Ex. 12
(https://www.rablighting.com/sites/default/files/features/datasheets/triboro_datasheet_0.pdf)

41. When supplied with electricity of a first wattage, the Accused Products emit output light having a wall plug efficiency in the range of from about 70 to about 80 lumens per watt of said electricity.

EZLED:

The RAB EZLED receives input electricity of 89W and emits a wall plug efficiency of 71 LPW.

Input Watts @ 120VAC	89
Output Lumens*	6357
Lumens per Watt*	71
Color Accuracy (CRI)*	68
Correlated Color Temp. (Nominal CCT)*	5000K

Ex. 14
(https://www.rablighting.com/sites/default/files/features/datasheets/ezled_datasheet_0.pdf)

MR16-7.5-940-25D-DIM-G2

The RAB MR16-7.5-940-25D-DIM-G2 receives input electricity of 8 W and emits a wall plug efficiency of 74.7 LPW.

PERFORMANCE

Watts	8W	Input Voltage	12V
Color Temp	3000K (Warm White)	Power Factor	>0.9
Lumens	560	Flicker	≤30%
Efficacy	74.7 lm/W	THDi	N/A
Color Accuracy	90 CRI	R9	50
L70 Lifespan	25,000 hours		

Ex. 15 (https://www.rablighting.com/product/MR16-7.5-940-25D-DIM-G2)

Technical Specifications

Technical Specifications

Product Type:
Small-Reflector

Bulb Shape:
MR16

Wattage:
7.5W

Wattage Equivalency:
75W Halogen

Typical Lumen Output:
560

Efficacy:
75 lm/W

Color Temperature:
3000K Warm White

CRI:
≥90

Base Type:
GU5.3

L70 Lifespan:
25,000 hours

Operating Temperature:
-20°C - 45°C

Dimmable:
Yes

Beam Angle:
35°

Warranty:
5-Year, No-Compromise Warranty

For Use in Emergency Fixtures:
No

For Use Outdoors in Open Fixtures:
No

Electrical Characteristics

Input Voltage:
12V

Id.

TRIBORO

The RAB TRIBORO receives input electricity of 32W, 48W, 64W, or 95W, and emits a wall plug efficiency in the range of from about 70 to about 80 lumens per watt.

TRIBORO 32W

Color Temperature	5000K	4000K	3000K	2000K
Input Watts	32	32	32	32
Output Lumens	3743	3434	3303	2399
Lumens Per Watt	118	107	104	75
Color Accuracy (CRI)	73	72	71	70

TRIBORO 48W

Color Temperature	5000K	4000K	3000K	2000K
Input Watts	48	48	47	48
Output Lumens	5426	4978	4788	3478
Lumens Per Watt	114	104	101	73
Color Accuracy (CRI)	73	72	71	70

TRIBORO 64W

Color Temperature	5000K	4000K	3000K	2000K
Input Watts	67	68	67	67
Output Lumens	7354	6747	6490	4714
Lumens Per Watt	109	100	97	70
Color Accuracy (CRI)	73	72	71	70

TRIBORO 95W

Color Temperature	5000K	4000K	3000K	2000K
Input Watts	93	94	93	93
Output Lumens	10,955	10,051	9667	7022
Lumens Per Watt	118	107	104	76
Color Accuracy (CRI)	73	72	71	70

Performance shown for Type III only. Visit rabweb.com for performance of Types II and IV.

Ex. 12
(https://www.rablighting.com/sites/default/files/features/datasheets/triboro_datasheet_0.pdf)

42. On information and belief, RAB Lighting makes, uses, sells, offers to sell within, and/or imports into the United States these infringing products.

43. On information and belief, RAB Lighting also knowingly induces and/or contributes to the infringement of one or more claims of the ’819 patent by others. On information and belief, RAB Lighting has had knowledge of the ’819 patent, and its infringement of the ’819 patent, since at least the filing date of this Complaint. On information and belief, RAB Lighting’s customers and the end users of the Accused Products test and/or operate the Accused Products in the United States in accordance with RAB Lighting’s

instructions contained in, for example, its user manuals, thereby also performing the claimed methods and directly infringing the asserted claims of the ’819 patent requiring such operation.

44. RAB Lighting also contributes to infringement of the ’819 patent by selling for importation into the United States, importing into the United States, and/or selling within the United States after importation the Accused Products and the non-staple constituent parts of the Accused Products, which are not suitable for substantial non-infringing use and which embody a material part of the inventions of the asserted claims of the ’819 patent. On information and belief, these products are known by RAB Lighting to be especially made or especially adapted for use in the infringement of the ’819 patent. End users of those products in the United States also directly infringe the ’819 patent.

45. As a result of RAB Lighting’s infringement of the ’819 patent, Cree Lighting has suffered and will continue to suffer substantial damages.

46. Cree Lighting is entitled to recover from RAB Lighting the damages sustained as a result of RAB Lighting’s infringing acts in an amount to be determined at trial.

47. Upon information and belief, RAB Lighting’s acts of infringement of the ’819 patent will continue after service of this Complaint unless enjoined by the Court. Thus, unless RAB Lighting is enjoined by this Court from continuing their infringement of the ’819 patent, Cree Lighting will suffer additional irreparable harm and impairment of the value of its patent rights. Cree Lighting has no adequate remedy at law for these wrongs and injuries. Thus, Cree Lighting is entitled to a permanent injunction against further infringement.

COUNT 3: INFRINGEMENT OF U.S. PATENT NO. 8,777,449

48. Cree Lighting re-alleges, adopts, and incorporates by reference the allegations contained in the foregoing paragraphs as if fully set forth herein.

49. Cree Lighting owns by assignment the right, title and interest in United States Patent No. 8,777,449 ("the '449 patent"), titled "Lighting Devices Comprising Solid State Light Emitters," which issued on July 15, 2014, naming Antony Paul Van De Ven, Wai Kwan Chan, and Ho Chin Wah as co-inventors. A true and correct copy of the '449 patent is attached as Exhibit 3.

50. As the owner of the '449 patent, Cree Lighting is authorized and has standing to bring legal action to enforce all rights arising under the '449 patent.

51. The '449 patent generally relates to lightweight, highly efficient recessed lighting devices. Efficiency of LED-based lighting devices is measured in terms of brightness output (in lumens) per power input (in watts). The inventors of the '449 patent developed high-efficiency recessed lighting devices that were lightweight, capable of outputting white light of at least 500 lumens with an input of about 15 watts or less, all in a lighting device weighing less than 750 grams. The LED-based lighting devices disclosed in the '449 patent achieve this efficiency and weight while providing consistently good color quality, suitable brightness and good solid state light emitter lifetimes.

52. On information and belief, in violation of 35 U.S.C. § 271, RAB Lighting has infringed and is continuing to infringe, literally and/or under the doctrine of equivalents, one or more claims of the '449 patent through the manufacture, offering for sale, sale, and/or importation of LED products. By way of example and without limitation, the RAB C6R7/10/189FAUNVW and R6R8935120WS are each an infringing product. Cree Lighting reserves the right to contend that additional LED products manufactured, offered for sale, sold, and/or imported by RAB Lighting infringe the '449 patent.

53. By way of example only, the Accused Products meet all the limitations of independent claim 10 of the ’449 Patent for at least the following reasons.

54. The Accused Products are each a lighting device.

C6R7/10/189FAUNVW:

Ex. 16 (https://www.rablighting.com/product/C6R7/10/189FAUNVW

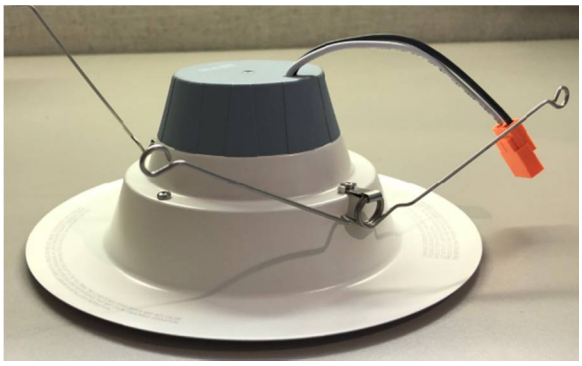
R6R8935120WS

Ex. 17 (https://www.rablighting.com/product/R6R8935120WS

55. The Accused Products include a trim element.

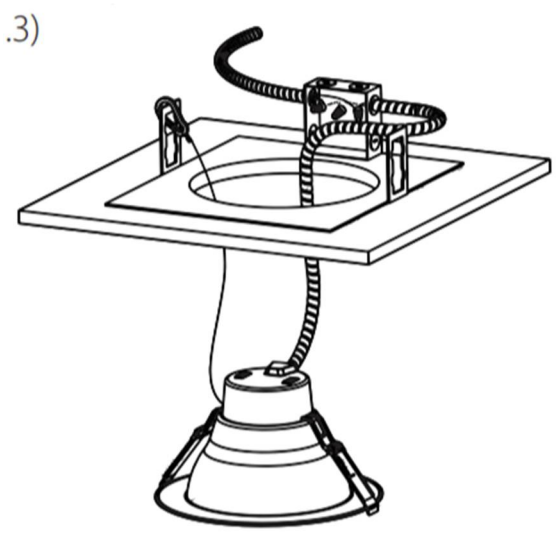
C6R7/10/189FAUNVW:

R6R8935120WS



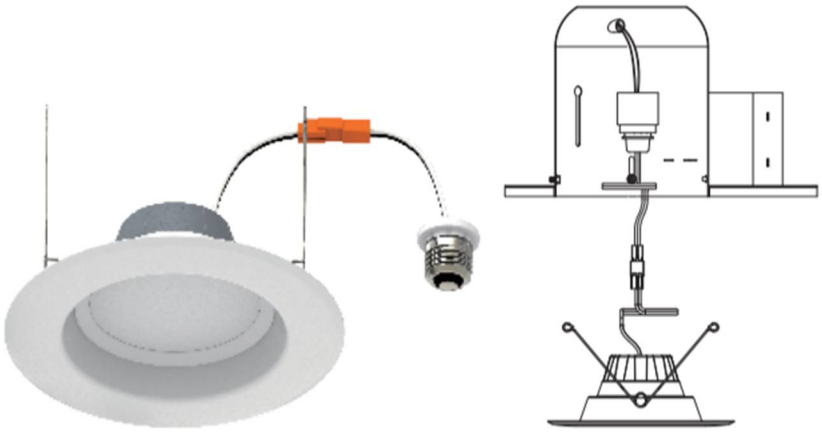
56. The Accused Products include an electrical connector.

C6R7/10/189FAUNVW:



Ex. 18 (https://www.rablighting.com/downloads/instructions/c6r7-10-189faunvw-inst.pdf

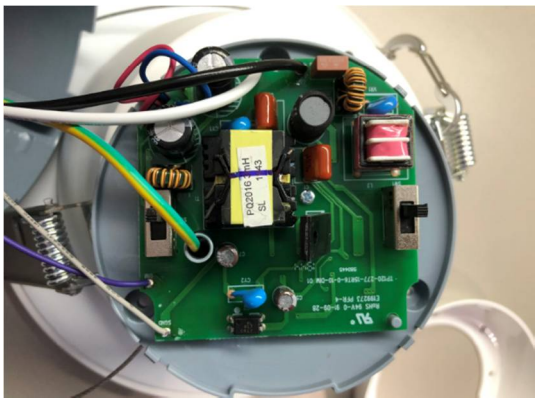
R6R8935120WS

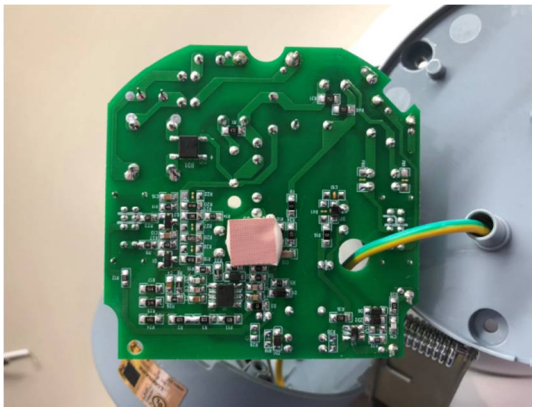


Ex. 19 (https://www.rablighting.com/downloads/instructions/5-6-inch-recessed-retrofit-inst-v2.pdf

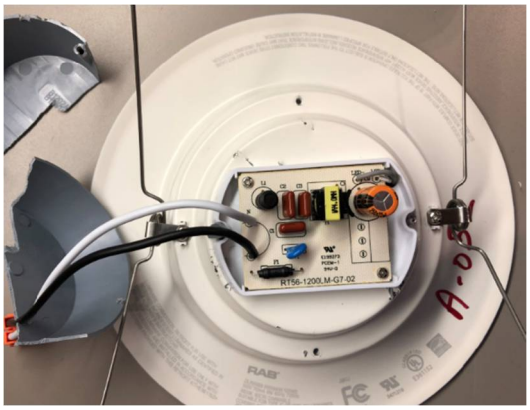
57. The Accused Products include at least a first driver component.

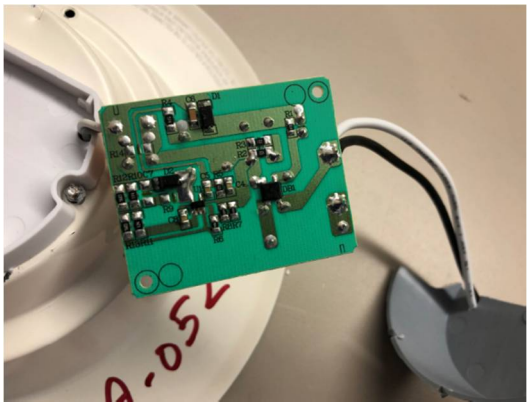
C6R7/10/189FAUNVW:





R6R8935120WS





58. The Accused Products include at least one solid state light emitter.

C6R7/10/189FAUNVW:

LED Characteristics

Lifespan:

50,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

LEDs:

Long-life, high-efficacy, surface-mount LEDs

Ex. 20 (https://www.rablighting.com/specs/C6R7/10/189FAUNVW

R6R8935120WS

LED Characteristics

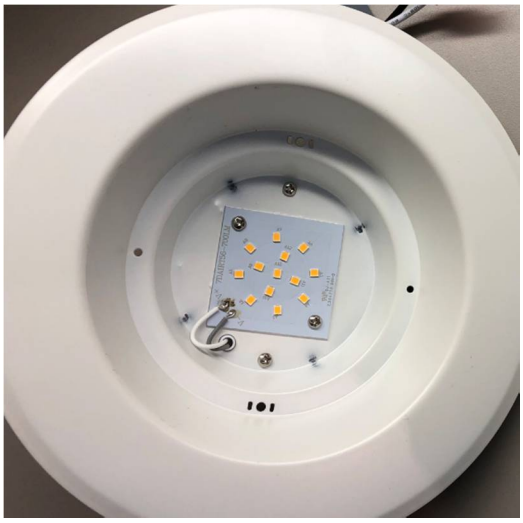
Lifespan:

50,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

LEDs:

Long-life, high-efficacy, surface-mount LEDs

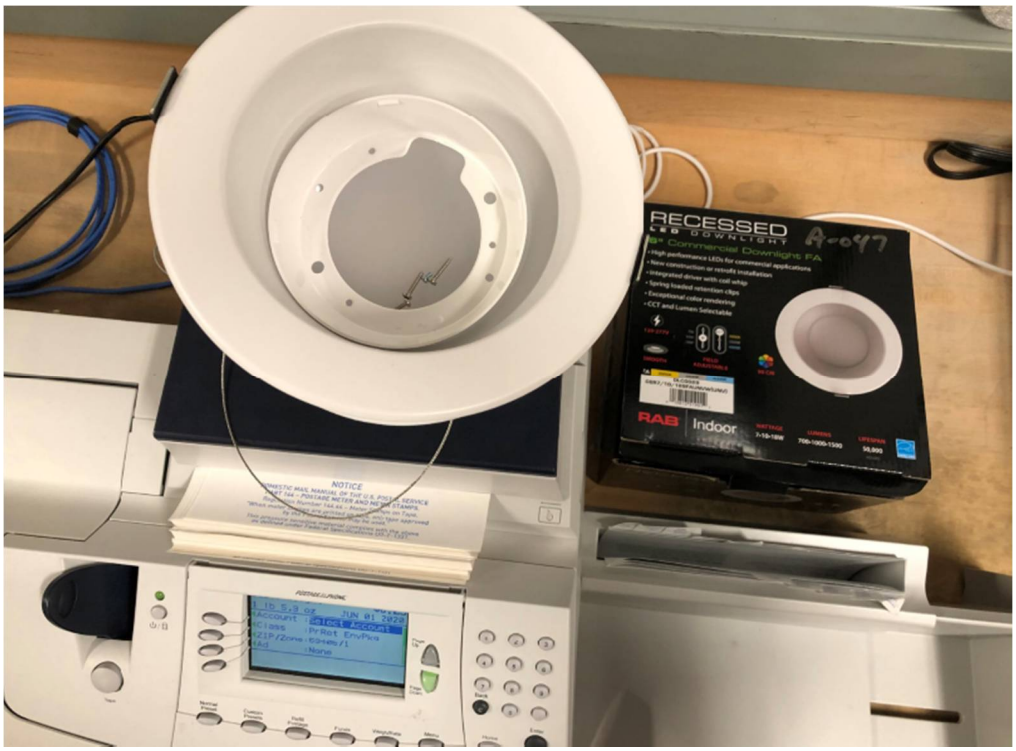
Ex. 21 (https://www.rablighting.com/specs/R6R8935120WS

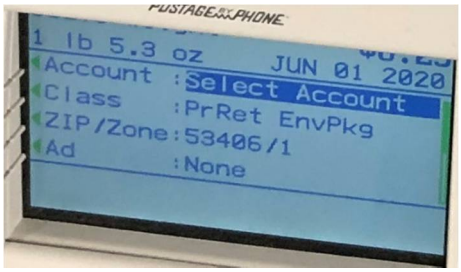


59. The lighting device weighs less than 750 grams.

C6R7/10/189FAUNVW:

The RAB C6R7/10/189FAUNVW weighs 1lb and 5.3 oz, which is approximately 603.8 grams.

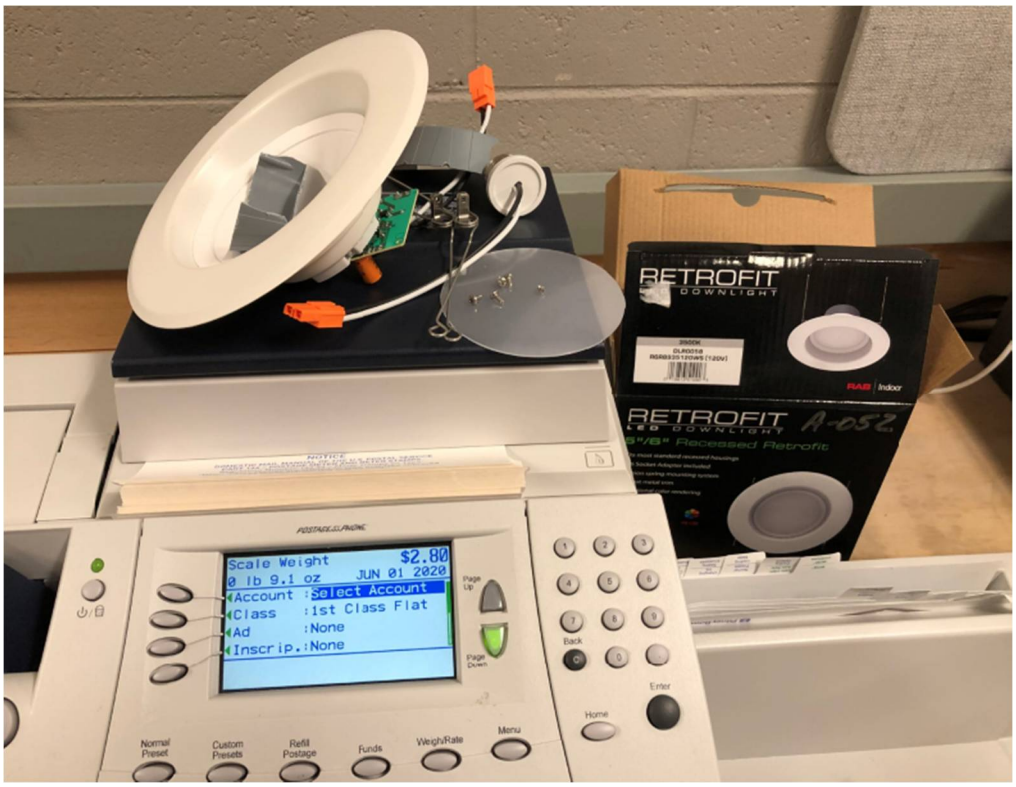


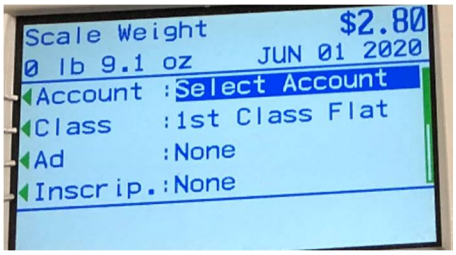


Ex. 20 (https://www.rablighting.com/specs/C6R7/10/189FAUNVW

R6R8935120WS:

The RAB R6R8935120WS weighs 9.1 oz, which is approximately 258 grams.



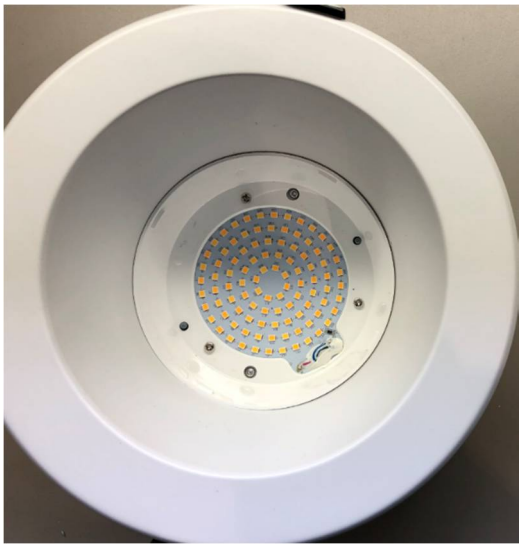


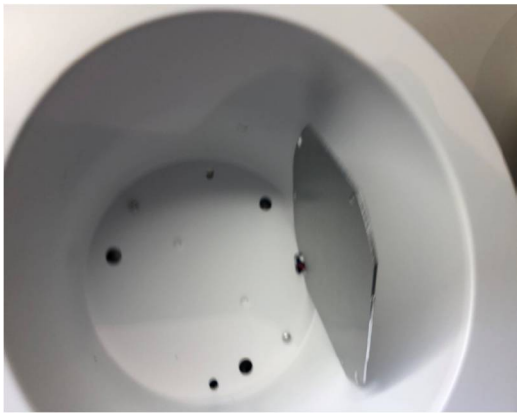
R6R8935120WS

Ex. 21 (https://www.rablighting.com/specs/R6R8935120WS

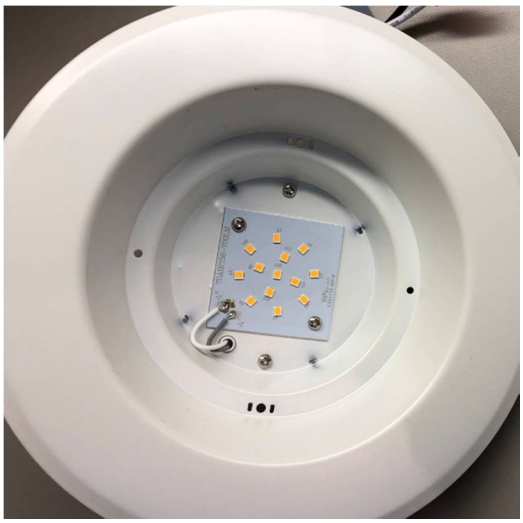
60. The Accused Products include at least one of the at least one solid state light emitter mounted on the trim element.

C6R7/10/189FAUNVW:





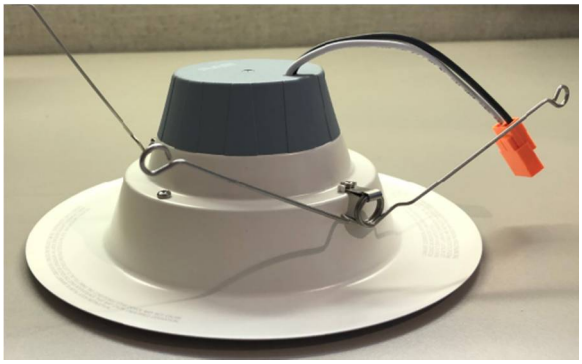
R6R8935120WS



61. The Accused Products include the trim element defining a trim element space.

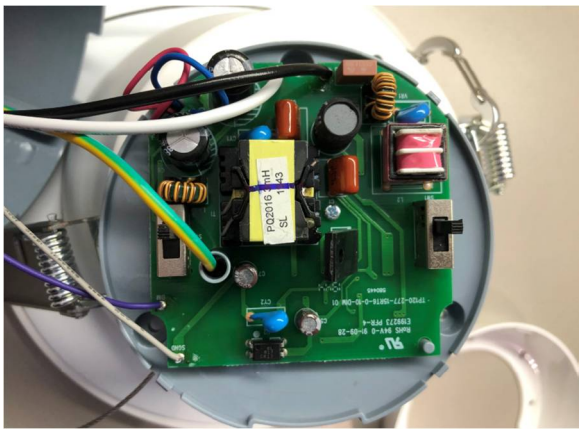
C6R7/10/189FAUNVW:

R6R8935120WS

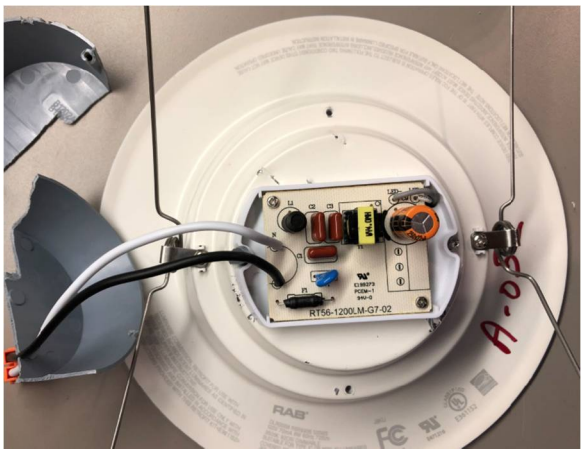


62. The Accused Products include the first driver component in the trim element space.

C6R7/10/189FAUNVW:



R6R8935120WS



63. In the Accused Products, if not more than about 15 watts is supplied to the electrical connector, the at least one solid state light emitter will illuminate so that the lighting device will emit white light of at least 500 lumens.

C6R7/10/189FAUNVW:

Ordering Matrix

Family	Size	Shape	Wattage
C	6	R	7/10/18
	6 = 6" **8** = 8" **9.5** = 9.5"	**R** = Round	**7/10/18** = 700lm-1500lm **9/12** = 700lm-900lm **10/15/22** = 1000lm-2000lm **14/18** = 1200lm-1500lm **20/25/32** = 2000lm-3000lm

Ex. 20 (https://www.rablighting.com/specs/C6R7/10/189FAUNVW

R6R8935120WS

Ordering Matrix

Family	Size	Shape	Wattage
R	6	R	8
	4 = 4" **6** = 6"	**R** = Round **S** = Square	**7** = 600lm-700lm **8** = 700lm-850lm **10** = 850lm-1000lm **11** = 900lm-1050lm **14** = 1200lm-1400lm

Ex. 21 (https://www.rablighting.com/specs/R6R8935120WS

64. On information and belief, RAB Lighting makes, uses, sells, offers to sell within, and/or imports into the United States these infringing products.

65. As a result of RAB Lighting's infringement of the '449 patent, Cree Lighting has suffered and will continue to suffer substantial damages.

66. Cree Lighting is entitled to recover from RAB Lighting the damages sustained as a result of RAB Lighting's infringing acts in an amount to be determined at trial.

67. Upon information and belief, RAB Lighting's acts of infringement of the '449 patent will continue after service of this Complaint unless enjoined by the Court. Thus, unless RAB Lighting is enjoined by this Court from continuing their infringement of the '449 patent, Cree Lighting will suffer additional irreparable harm and impairment of the value of its patent

rights. Cree Lighting has no adequate remedy at law for these wrongs and injuries. Thus, Cree Lighting is entitled to a permanent injunction against further infringement.

COUNT 4: INFRINGEMENT OF U.S. PATENT NO. 9,261,270

68. Cree Lighting re-alleges, adopts, and incorporates by reference the allegations contained in the foregoing paragraphs as if fully set forth herein.

69. Cree Lighting owns by assignment the right, title and interest in United States Patent No. 9,261,270 ("the '270 patent"), titled "LED Lighting Fixture," which issued on February 16, 2016, naming Alan J. Ruud, Kurt S. Wilcox, Steven R. Walczak, and Wayne Guillien as co-inventors. A true and correct copy of the '270 patent is attached as Exhibit 4.

70. As the owner of the '270 patent, Cree Lighting is authorized and has standing to bring legal action to enforce all rights arising under the '270 patent.

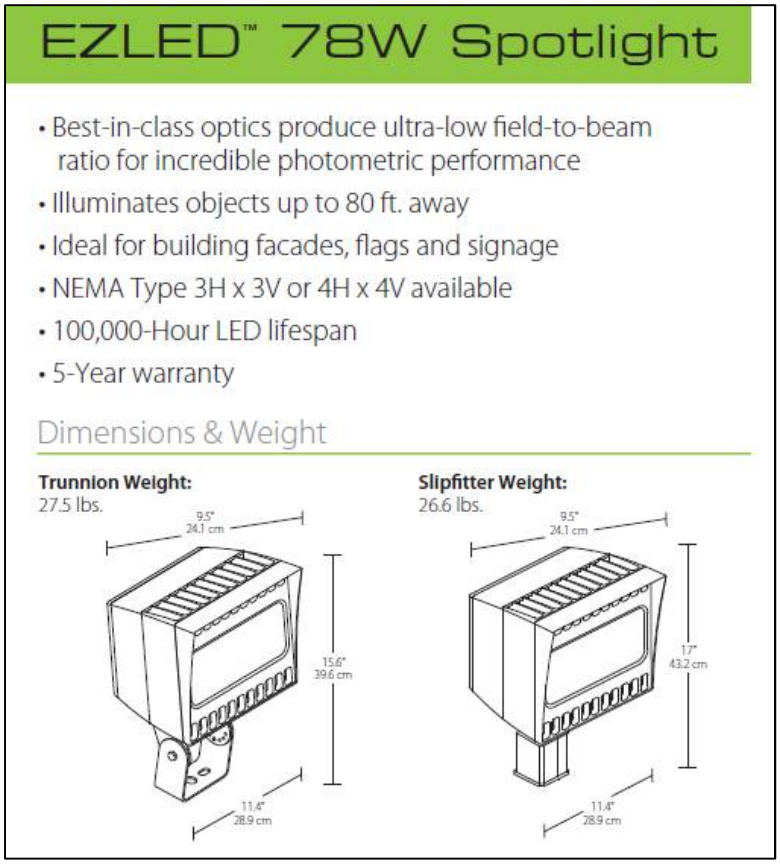
71. The '270 patent generally relates to lighting fixtures using LED units. The '270 patent discloses a novel structure for an LED-based lighting fixture that provides natural convective cooling by permitting air/water flow through an air gap between an LED module and a chamber containing a power circuitry driver. As a result, the invention of the '270 patent enables an LED-lighting fixture with improved thermal properties to ensure long device life.

72. On information and belief, in violation of 35 U.S.C. § 271, RAB Lighting has infringed and is continuing to infringe, literally and/or under the doctrine of equivalents, one or more claims of the '270 patent through the manufacture, offering for sale, sale, and/or importation of LED products. By way of example and without limitation, the RAB EZLED78TB44 is an infringing product. Cree Lighting reserves the right to contend that additional LED products manufactured, offered for sale, sold, and/or imported by RAB Lighting infringe the '270 patent.

73. By way of example only, the Accused Products meet all the limitations of independent claim 1 of the ’270 Patent for at least the following reasons.

74. The RAB EZLED78TB44 is a light fixture as shown below.

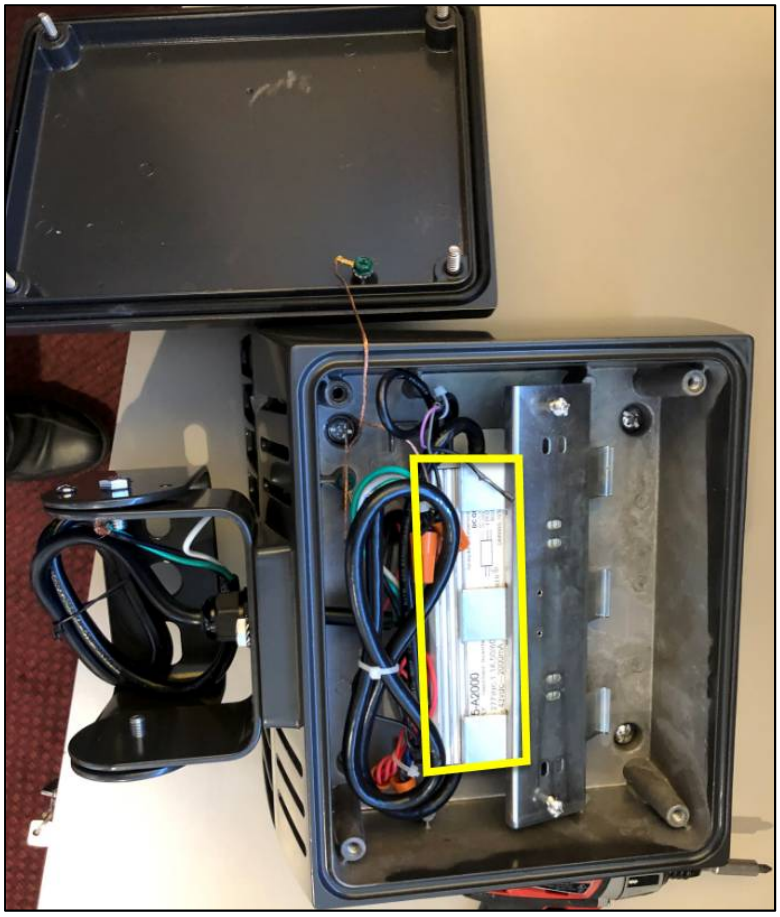
Ex. 14 (https://www.rablighting.com/sites/default/files/features/datasheets/ezled_datasheet_0.pdf)



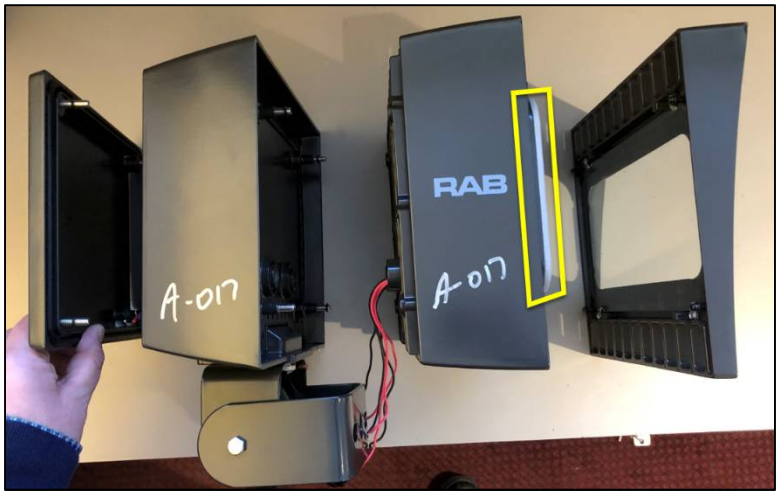
Id.

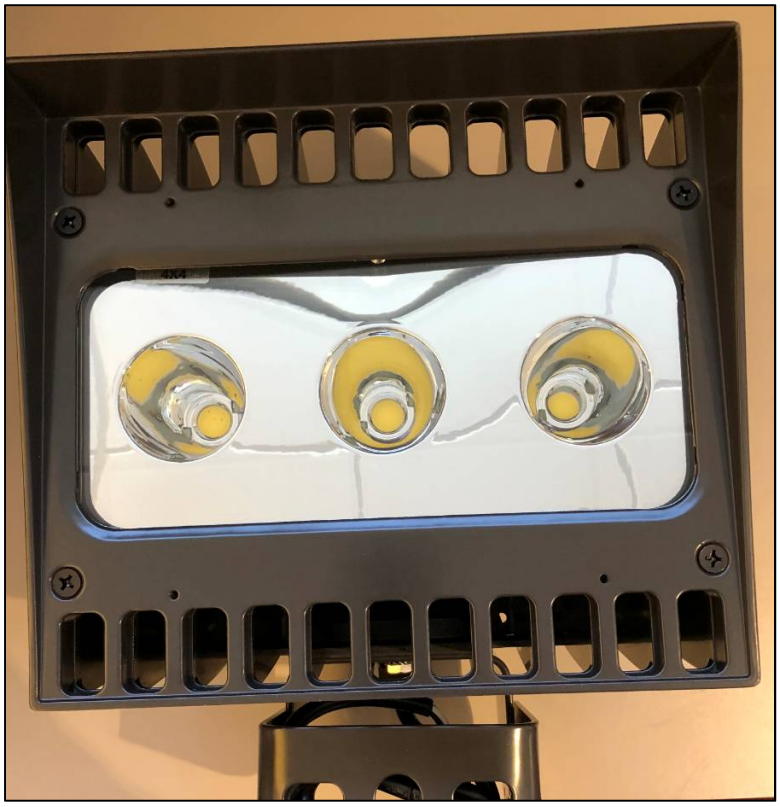
75. The RAB EZLED78TB44 includes a chamber as shown below.

76. The RAB EZLED78TB44 includes at least one power-circuitry driver within the chamber as shown below.



77. The RAB EZLED78TB44 includes at least one LED module outside the chamber as shown below.





78. The RAB EZLED78TB44 includes at least one air gap between the chamber and the at least one LED module. As shown below, the RAB The RAB EZLED78TB44's air gap permits air/water-flow through it.

79. On information and belief, RAB Lighting makes, uses, sells, offers to sell within, and/or imports into the United States these infringing products.

80. As a result of RAB Lighting's infringement of the '270 patent, Cree Lighting has suffered and will continue to suffer substantial damages.

81. Cree Lighting is entitled to recover from RAB Lighting the damages sustained as a result of RAB Lighting's infringing acts in an amount to be determined at trial.

82. Upon information and belief, RAB Lighting's acts of infringement of the '270 patent will continue after service of this Complaint unless enjoined by the Court. Thus, unless RAB Lighting is enjoined by this Court from continuing their infringement of the '270 patent, Cree Lighting will suffer additional irreparable harm and impairment of the value of its patent rights. Cree Lighting has no adequate remedy at law for these wrongs and injuries. Thus, Cree Lighting is entitled to a permanent injunction against further infringement.

COUNT 5: INFRINGEMENT OF U.S. PATENT NO. 9,476,570

83. Cree Lighting re-alleges, adopts, and incorporates by reference the allegations contained in the foregoing paragraphs as if fully set forth herein.

84. Cree Lighting owns by assignment the right, title and interest in United States Patent No. 9,476,570 ("the '570 patent"), titled "Lens with Controlled Backlight Management," which issued on October 25, 2016, naming Kurt S. Wilcox and Christopher Strom as co-inventors. A true and correct copy of the '570 patent is attached as Exhibit 5.

85. As the owner of the '570 patent, Cree Lighting is authorized and has standing to bring legal action to enforce all rights arising under the '570 patent.

86. The '570 patent relates generally to LED lighting fixtures having a light distribution towards a preferential side of the fixture. Specifically, the '570 patent discloses a novel structure of a lens having an outer surface and a refracting inner surface, where the inner surface includes a front sector and a back sector that are centered on the preferential and non-preferential sides, respectively, and that have different surface configurations. As a result, the invention of the '570 patent enables achieving a desired illumination pattern in various commercial applications, focusing emission toward an area intended to be illuminated.

87. On information and belief, in violation of 35 U.S.C. § 271, RAB Lighting has infringed and is continuing to infringe, literally and/or under the doctrine of equivalents, one or more claims of the '570 patent through the manufacture, offering for sale, sale, and/or importation of LED products. By way of example and without limitation, the RAB LotBlaster is an infringing product. Cree Lighting reserves the right to contend that additional LED products manufactured, offered for sale, sold, and/or imported by RAB Lighting infringe the '570 patent.

88. By way of example only, the Accused Products meet all the limitations of independent claim 1 of the '570 Patent for at least the following reasons.

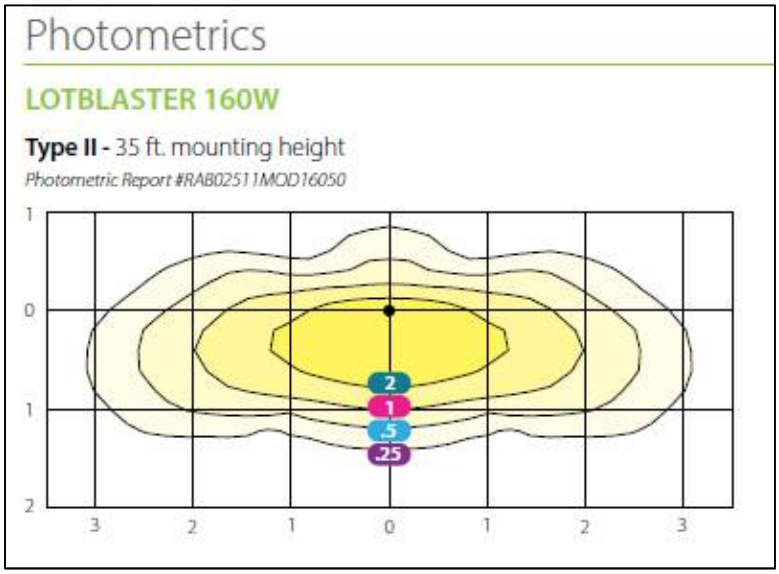
89. The RAB LotBlaster Area LED Light ("LotBlaster") includes a lens for distribution of light predominantly toward a preferential side from a light emitter having an emitter axis and defining an emitter plane. For example, the LotBlaster includes a lens for distribution of light in compliance with the Illumination Engineering Society (IES) Types II, III, and IV distributions.

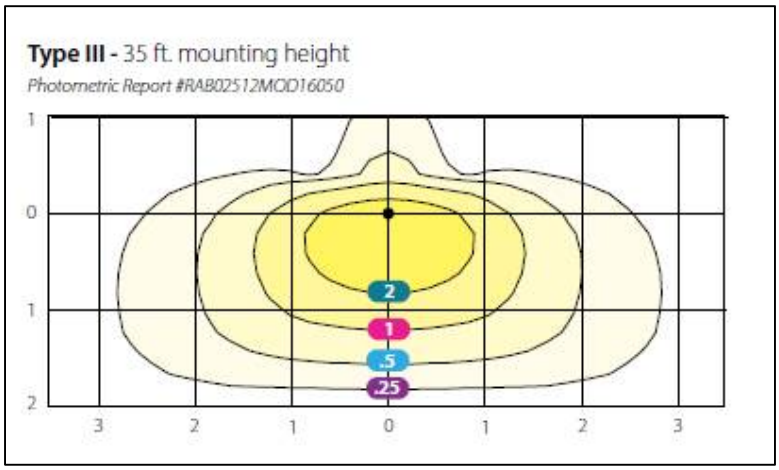
Ex. 22 (https://www.rablighting.com/sites/default/files/features/datasheets/lotblaster_datasheet_0.pdf).

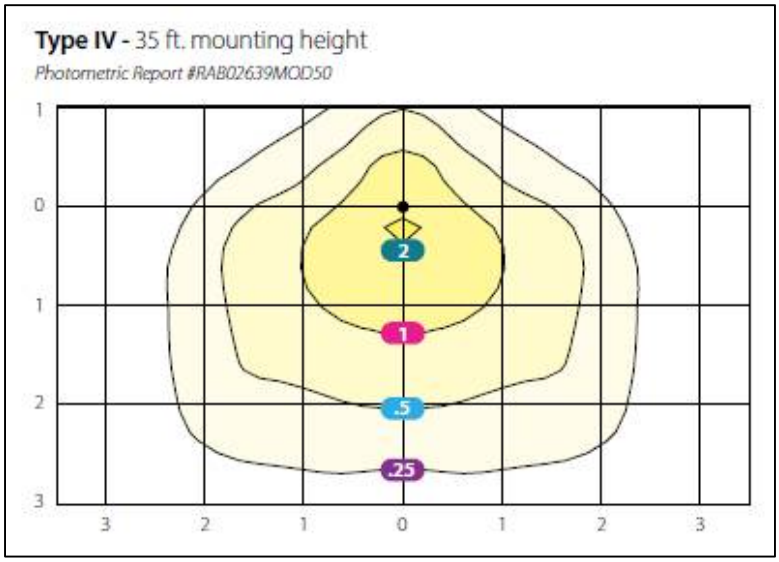
90. For example, the lens distributes light from a light emitter, as shown below.

Lens: Clear acrylic lens with integrated optics
Optics: Available in IES Type II, III, IV and VS distributions

91. For example, the light emitter has an emitter axis and defines an emitter plane, as shown below with respect to the IES Types II, III, and IV distribution profiles.

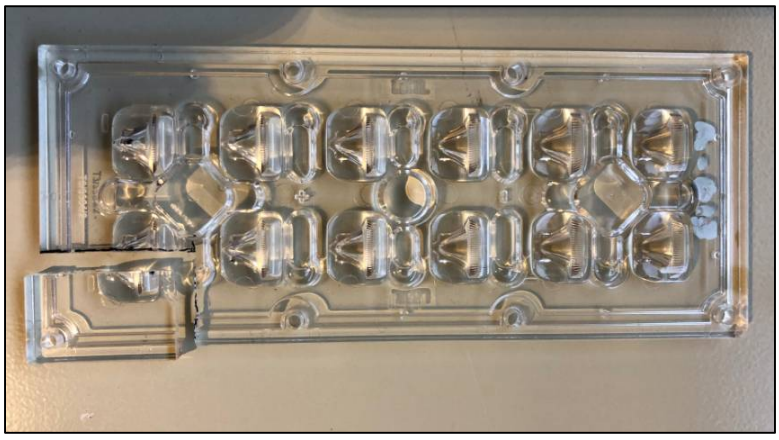


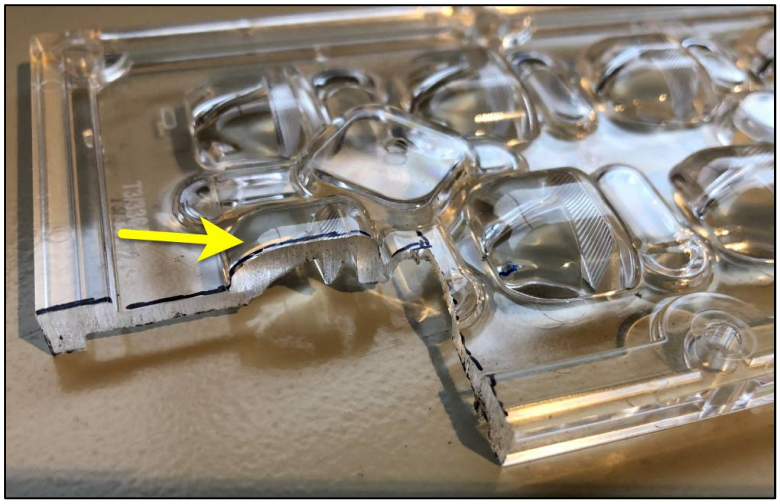


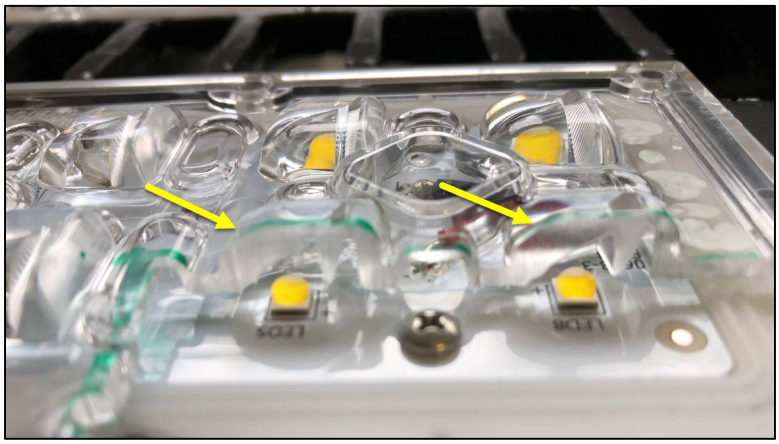


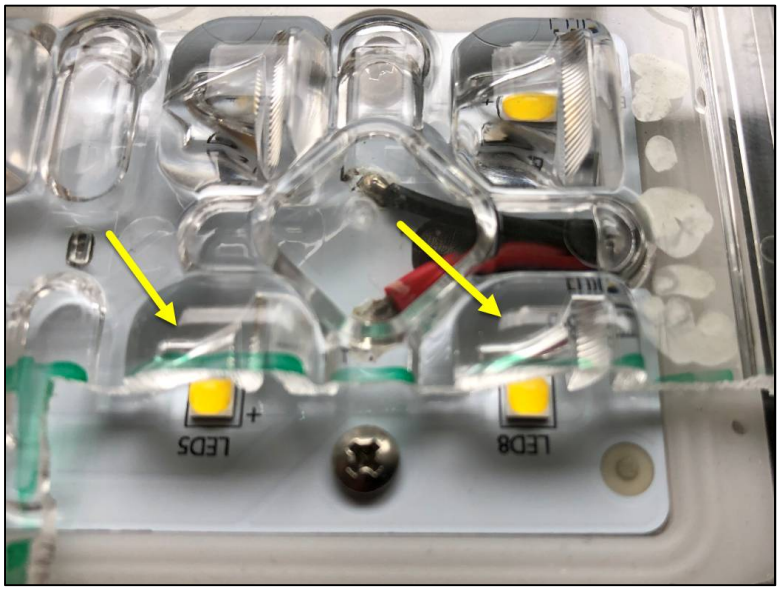
Ex. 22 (https://www.rablighting.com/sites/default/files/features/datasheets/lotblaster_datasheet_0.pdf).

92. The LotBlaster comprises an outer surface configured for refracting emitter light predominantly toward the preferential side. For example, the LotBlaster lens has an outer surface.





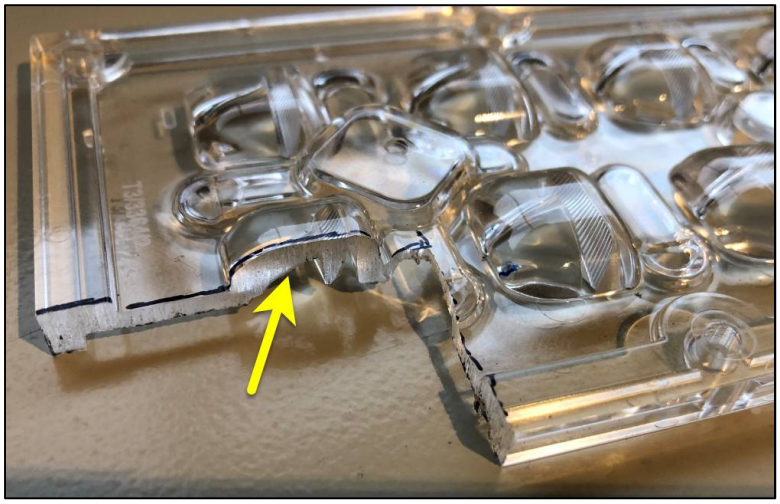


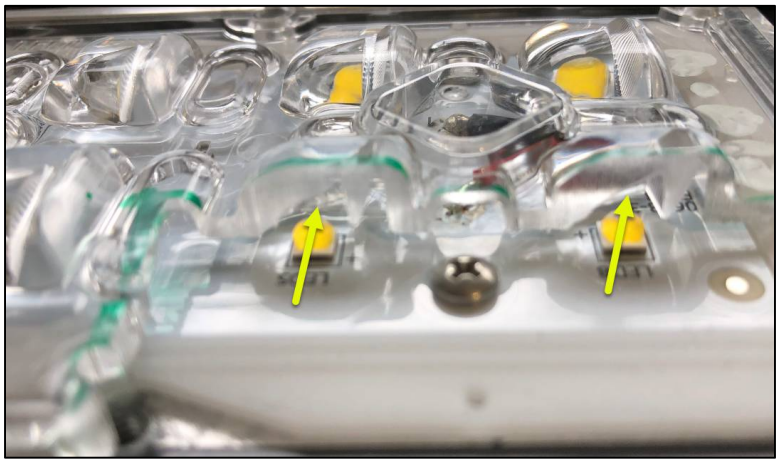

LED5
LED8

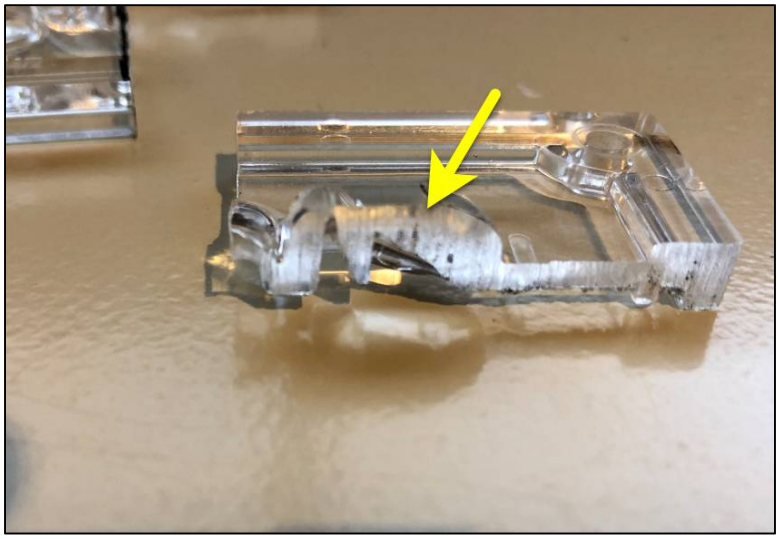
93. For example, the LotBlaster's outer surface refracts light from the light emitter, predominantly in a direction toward a preferential side of the lens.

Lens: Clear acrylic lens with integrated optics
Optics: Available in IES Type II, III, IV and VS distributions

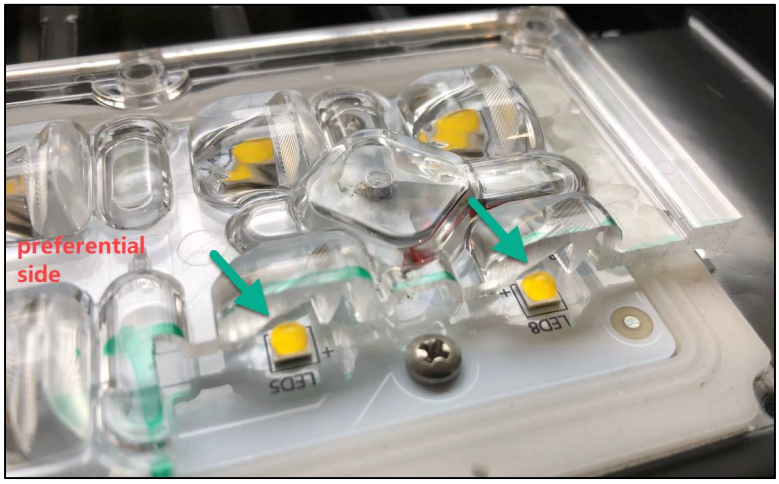
94. The LotBlaster comprises a refracting inner surface configured for refracting light from the emitter. *See*, *e.g.*:



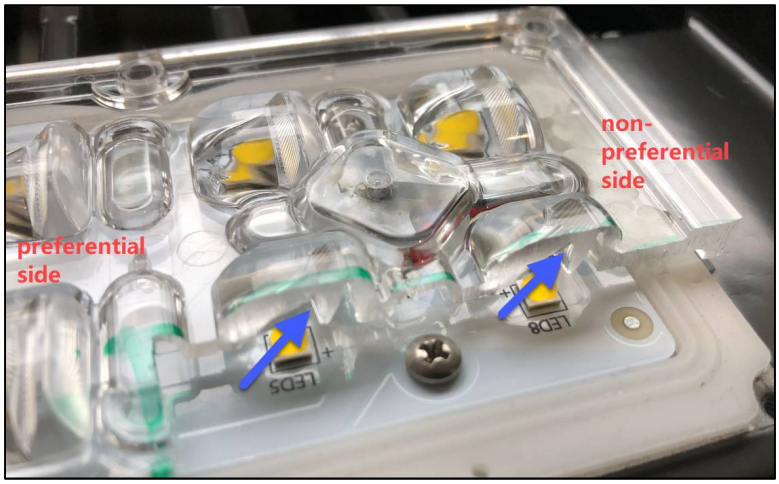




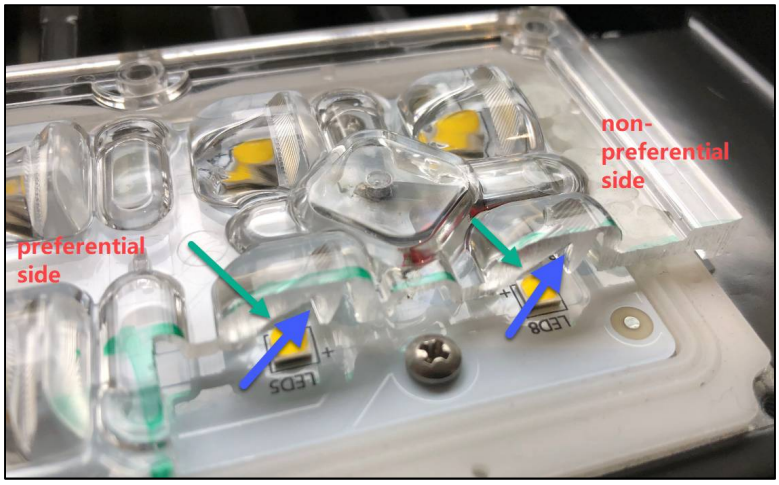
95. The LotBlaster's refracting inner surface comprises a front sector centered on the preferential side. For example, the refracting inner surface includes a front sector, as shown by a green arrow below, that is centered on the preferential side.

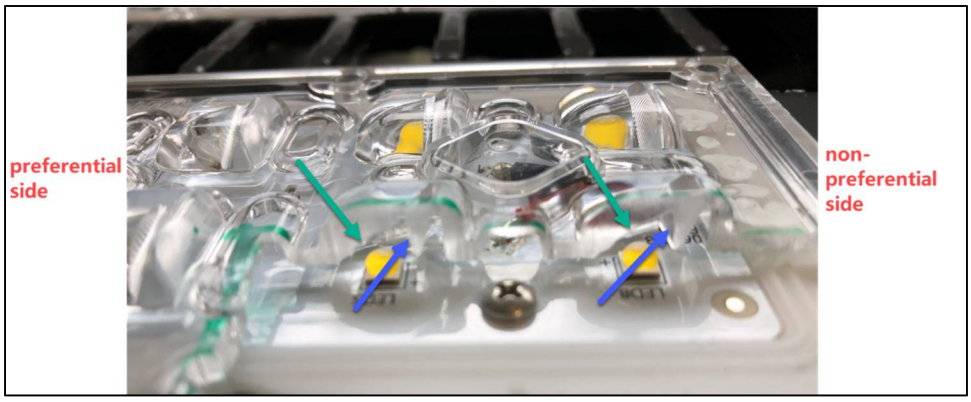


96. The LotBlaster's refracting inner surface comprises a back sector centered on the non-preferential side radially opposite the preferential side and having a surface configuration differing from a surface configuration of the front sector. For example, the refracting inner surface includes a back sector, as shown by a blue arrow below, that is centered on the non-preferential side radially opposite the preferential side.



97. For example, the back sector (blue arrow below) has a surface configuration that is different from the surface configuration of the front sector (green arrow below).





98. On information and belief, RAB Lighting makes, uses, sells, offers to sell within, and/or imports into the United States these infringing products.

99. As a result of RAB Lighting's infringement of the '570 patent, Cree Lighting has suffered and will continue to suffer substantial damages.

100. Cree Lighting is entitled to recover from RAB Lighting the damages sustained as a result of RAB Lighting's infringing acts in an amount to be determined at trial.

101. Upon information and belief, RAB Lighting's acts of infringement of the '570 patent will continue after service of this Complaint unless enjoined by the Court. Thus, unless RAB Lighting is enjoined by this Court from continuing their infringement of the '570 patent, Cree Lighting will suffer additional irreparable harm and impairment of the value of its patent rights. Cree Lighting has no adequate remedy at law for these wrongs and injuries. Thus, Cree Lighting is entitled to a permanent injunction against further infringement.

PRAYER FOR RELIEF

WHEREFORE, Cree Lighting respectfully requests:

A. That Judgment be entered that RAB Lighting has infringed one or more claims of the patents-in-suit in this litigation, directly and indirectly, by way of inducement or contributory infringement, literally or under the doctrine of equivalents;

B. That, in accordance with 35 U.S.C. § 283, RAB Lighting and all affiliates, employees, agents, officers, directors, attorneys, successors, and assigns and all those acting on behalf of or in active concert or participation with any of them, be permanently enjoined from (1) infringing the patents-in-suit and (2) making, using, selling, offering for sale, and/or importing the patents-in-suit;

C. An award of damages sufficient to compensate Cree Lighting for RAB Lighting's infringement under 35 U.S.C. § 284;

D. Costs and expenses in this action;

E. An award of prejudgment and post-judgment interest; and

F. Such other and further relief as the Court may deem just and proper.

JURY DEMAND

102. Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Cree Lighting respectfully demands a trial by jury on all issues so triable.

DATED : July 15, 2020

By: */s/ Richard W. Erwine*

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Counsel for IDEAL INDUSTRIES LIGHTING LLC d/b/a Cree Lighting.