

TB-5L & TB-3L



Powerful LED
Beam Lighting

24vDC



Features



ToroBeam® LED beam bar lighting system is an easy to use lighting systems for edge lit lightboxes and architectural lighting projects.

High lumen beams emit from special lenses designed to reach distances up to 5 meters (16 ft).



Light-Weight

ToroBeam® LED beam bars are made with an aluminum core for rigidity and heat sink.

At only 2mm thick, they are extremely light-weight.



Easily Connect

We made it easy to connect one beam bar to another with barrel connectors and wire. This type of plug and play connection systems is simple use.



Power Efficient

ToroBeam® LED beam bars are made with 3535 LED Samsung chips which are highly efficient and super bright.

Each LED emits over 316 lumens and requires 24vDC.



Easy Install

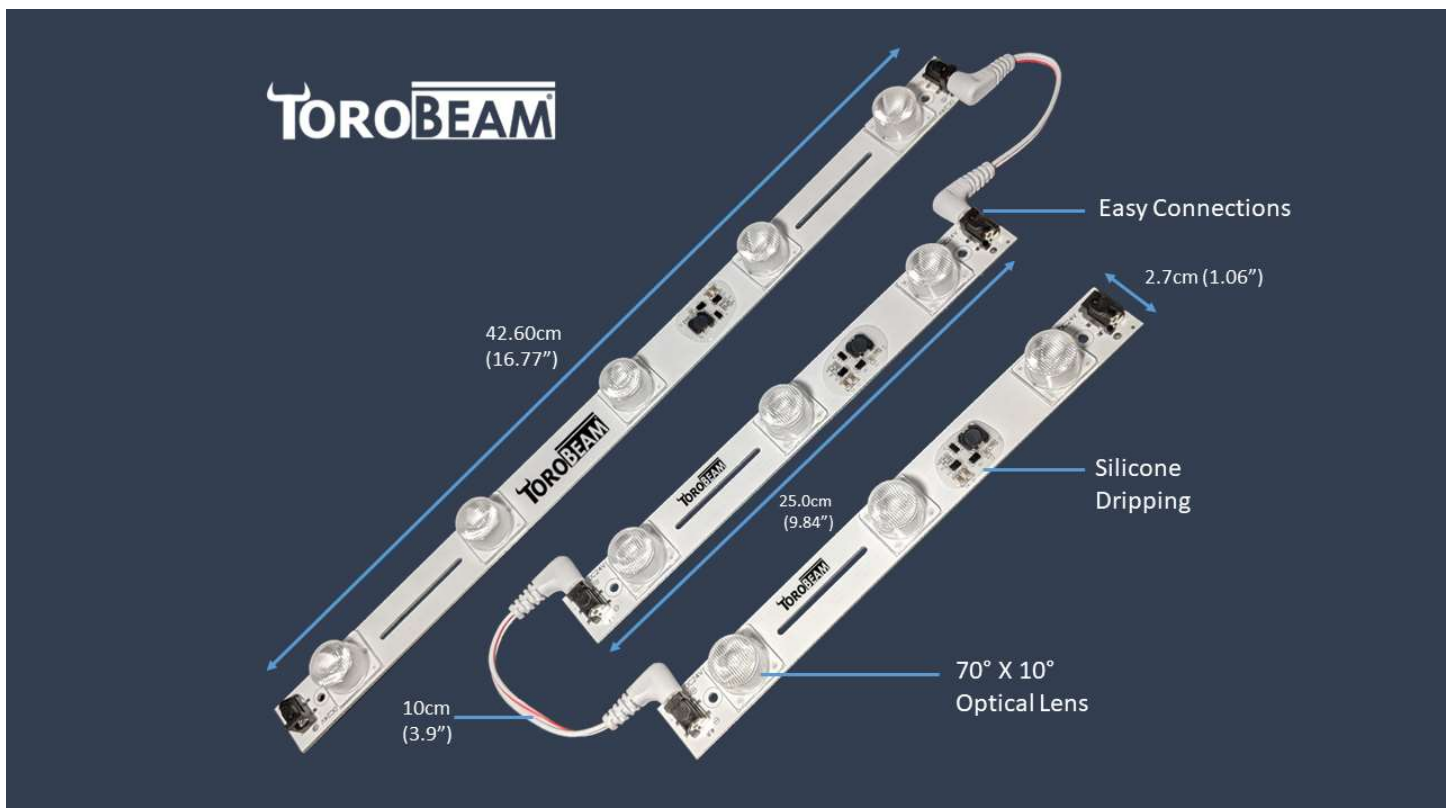
A self-adhesive strip on the back of every beam bar allows for easy installation on flat surfaces.

Alternatively, there are holes on each bar to allow for other installation techniques such as using screws or fastening with custom brackets.

Features



	TB-3L	TB-5L
LED Beams	3 Beams	5 Beams
Material	Aluminum PCB	Aluminum PCB
Dimensions	25.0 X 2.7 X 0.2 (cm) 9.84" X 1.06" X 0.08"	42.6 X 2.7 X 0.2 16.77" X 1.06" X 0.08"
Lumen Output	900lm	1500lm
Wattage	7.7w	12.8w
Voltage	24vDC	24vDC
LED Chip	Samsung 3535	Samsung 3535
CCT / CRI	6500k / >70	6500k / >70
Protection Rating	IP54	IP54



ASSEMBLY

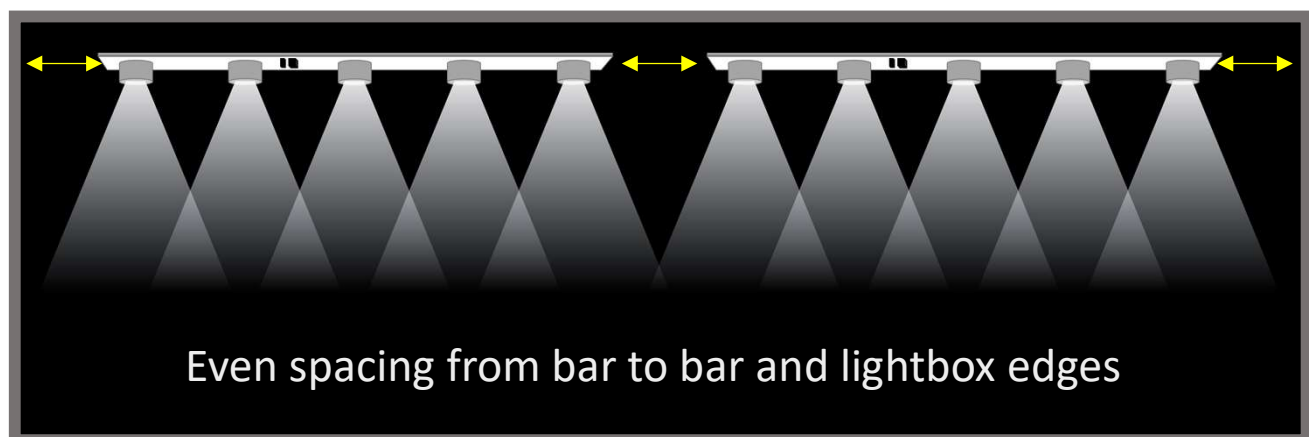
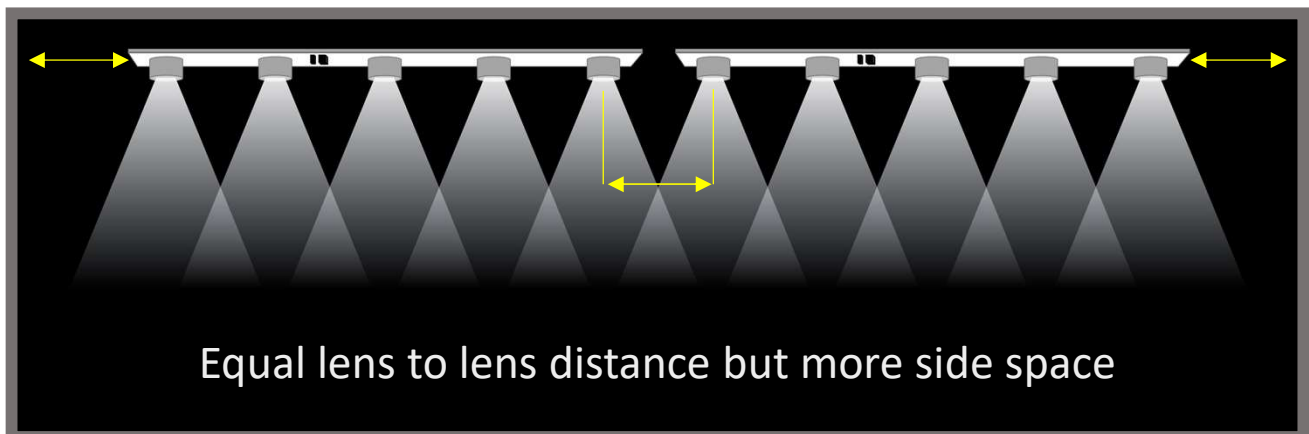
beam bar distance



ToroBeam® LED beam bars come in two lengths, 42.6cm (16.8") and 25cm (9.84") long and a 10cm (3.94") lens to lens distance.

Separating ToroBeam® LED beam bars at an equal lens to lens distance is important but not always necessary as the dimensions of your lightbox might leave too much spacing.

Using the **online simulator** will help you calculate distance, ToroBeam® bars required and power specs for your application.



Visit www.ToroBeam.com/simulator for online calculations.

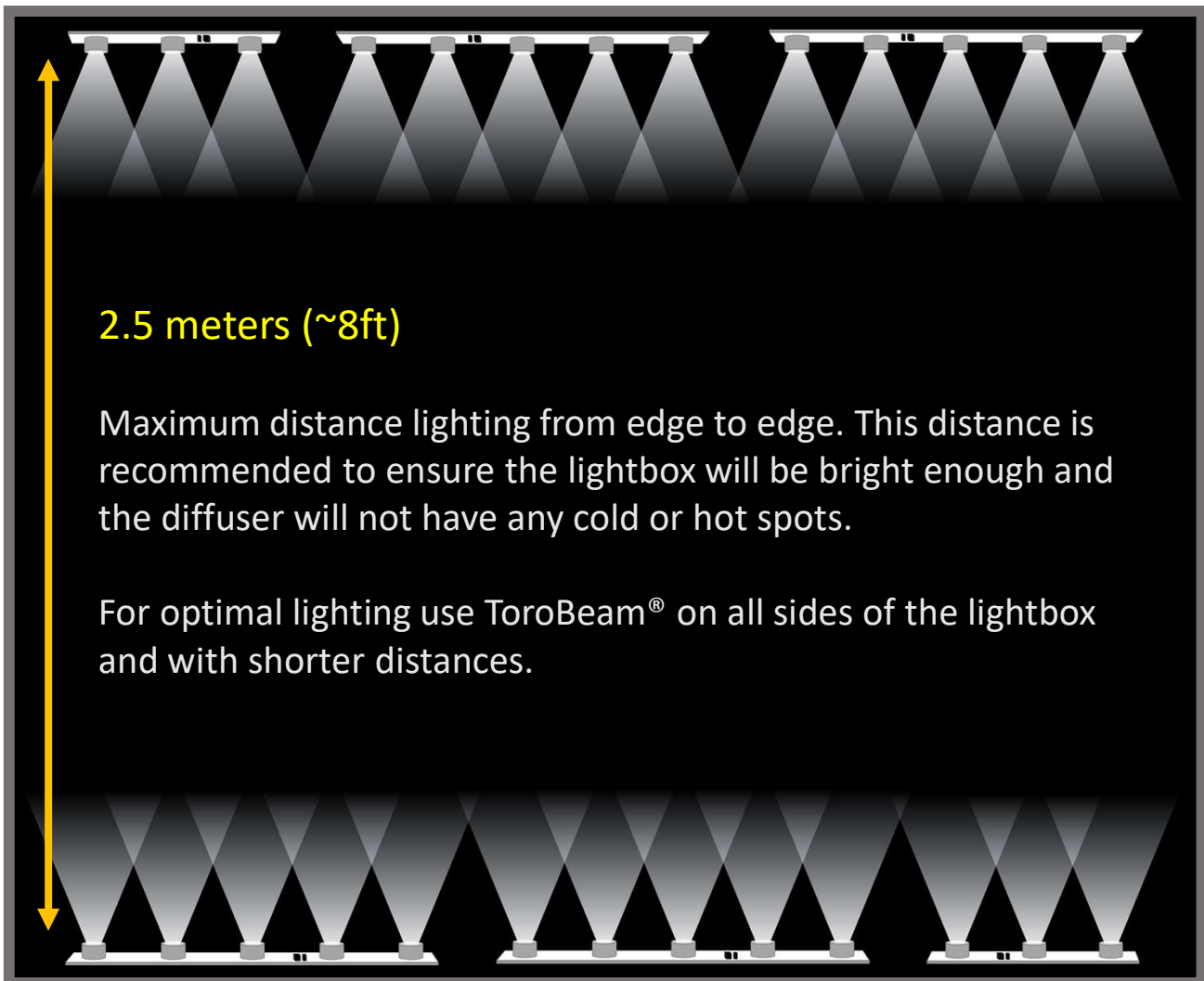
LIMITATIONS

lighting distance



With ToroBeam® LED beam bars, it's easy to brighten up a lightboxes by pointing the beams towards the center of the box from 2 or 4 sides of the box.

Although the light beams are very strong, very large lightboxes would require different strategies to ensure the center of the box is as bright as the edges. Some lightboxes would require a backlit lighting system such as ToroMesh® or ToroTile®.



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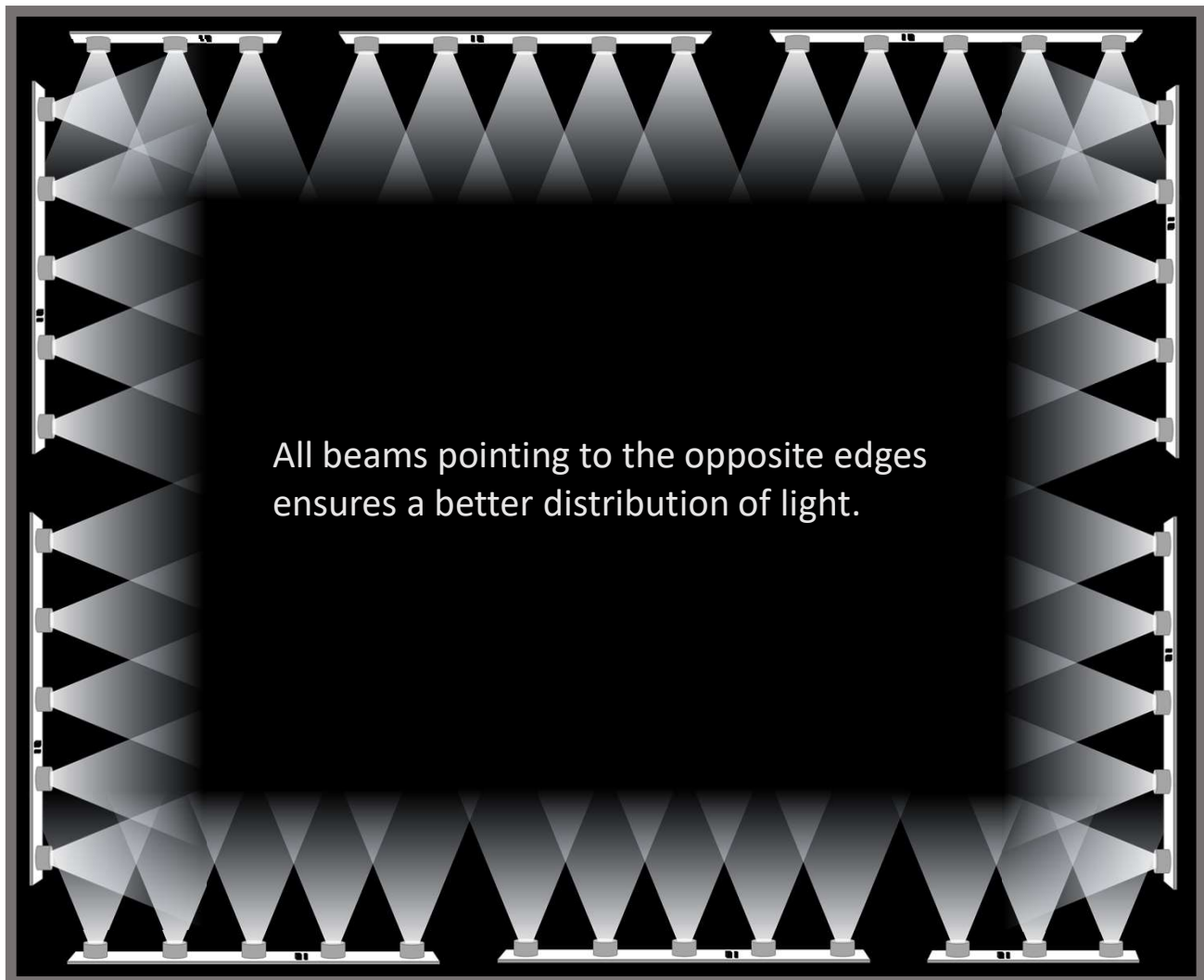
LIMITATIONS

lighting distance



Adding more beam bars to point to every box edge ensure a better distribution of light. For longer boxes this might not be required.

It is recommended to use a white substrate for single sided application to reflect the light back to the diffuser. Lining the interior of the lightbox with a white matte tape or paint is ideal.



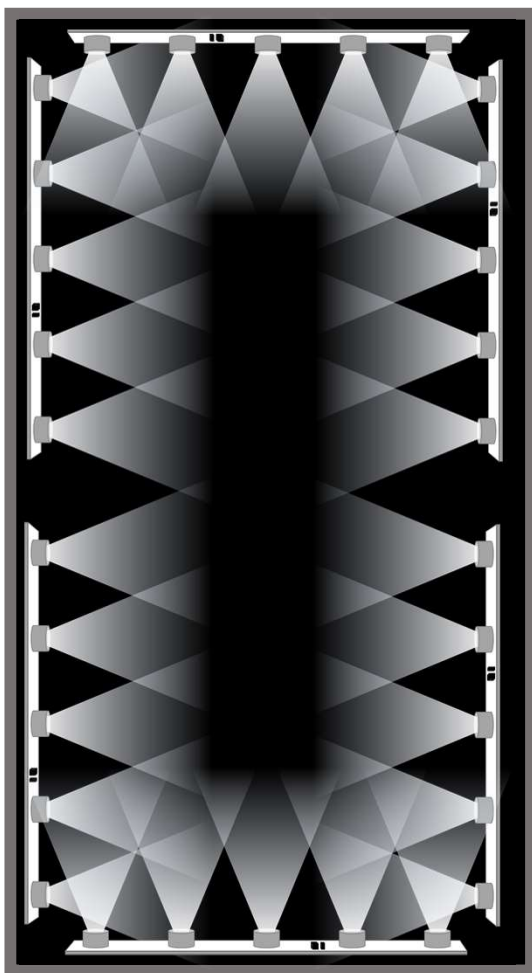
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LIMITATIONS

lighting distance

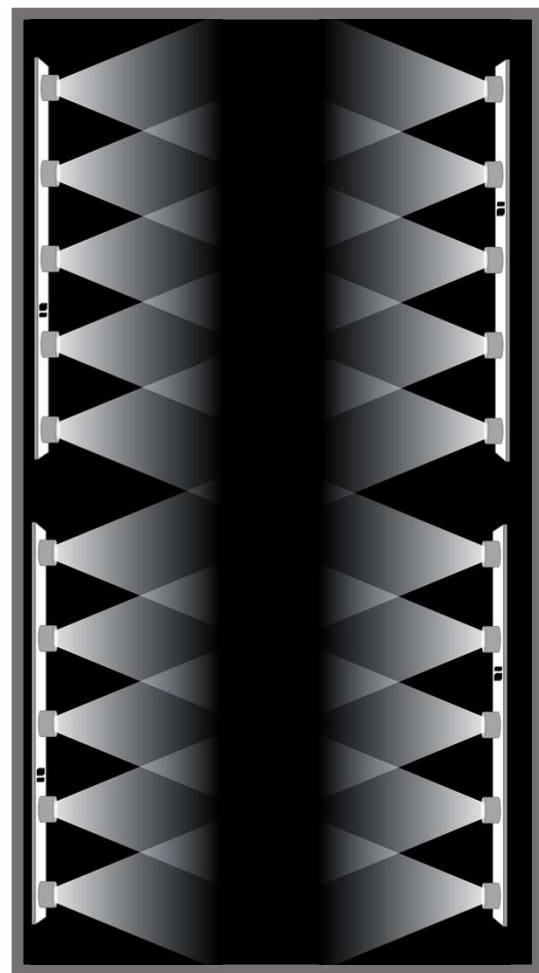
TOROBEAM

Not all box sizes require beams from all sides. Depending on your application, diffuser and substrate (for single sided boxes), installing ToroBeam® on only two sided should give off enough lighting with no cold spots.



50-100cm (1.6-3.28ft)

Not necessary.



50-100cm (1.6-3.28ft)

Adequate lighting.

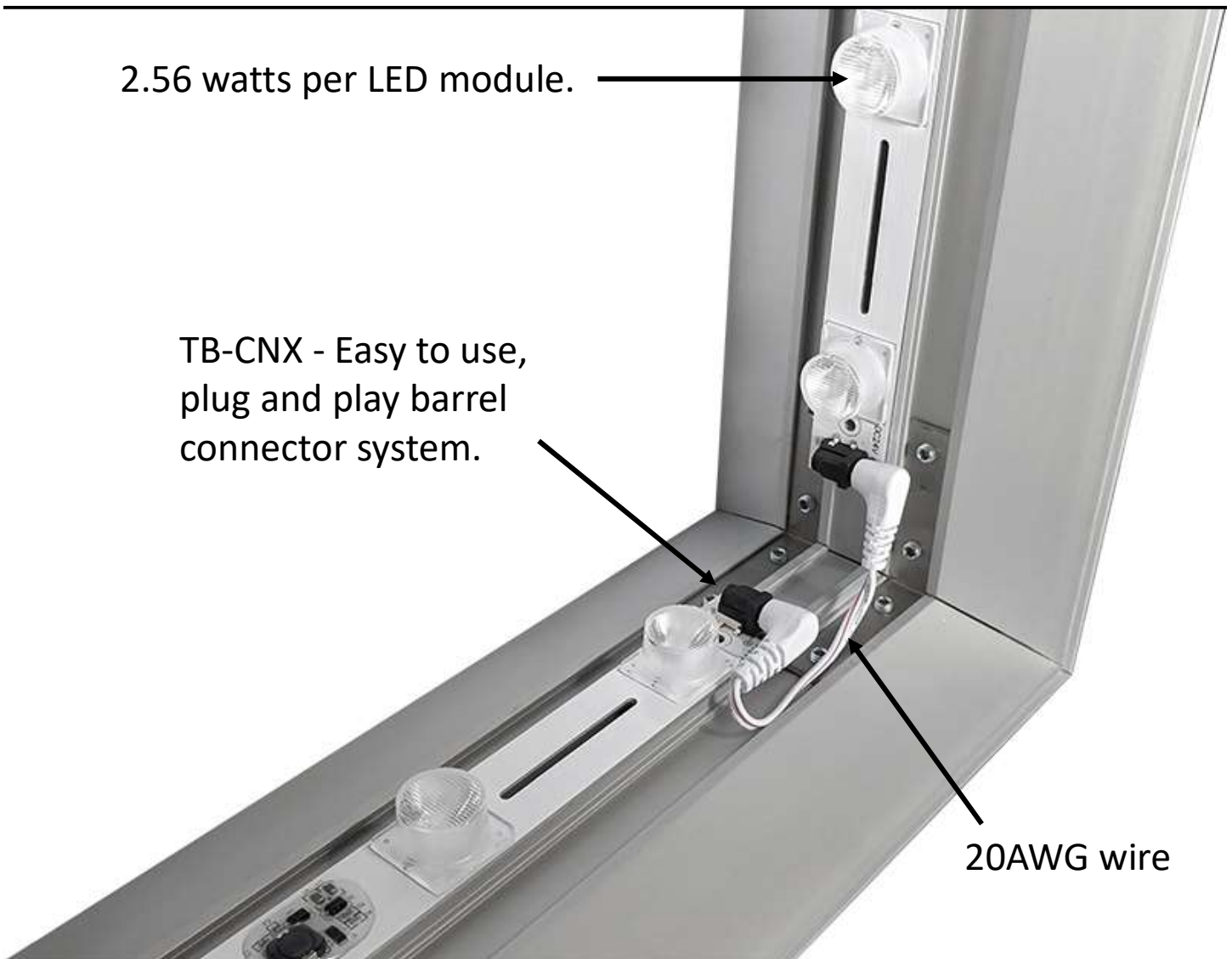
Visit www.ToroBeam.com/simulator for online calculations.

LIMITATIONS

connecting bars



Every ToroBeam® LED is powered by 2.56 watts, 24vDC. The internal circuitry was designed to interconnect up to 40 LED beams or a maximum of 82 watts per segment (*see product specs for more details*).



POWER IT UP

connecting to power

TOROBREAM

Using TB-CNX connectors to connect one bar to another is simple using a barrel connector system. Connecting to a power source is just as simple. (visit www.ToroBeam.com/simulator)

Calculate the required power needed to power up your segment or use the **online simulator** and connect the last ToroBeam® bar to your power source using a TB-PWR-CNX connector. It uses the same plug and play barrel connection system.

Use Class 2 LED power drivers only.

