TECTONIC LED HIGH BAY

Features & Benefits

High LED efficiency of 80 lumens/watt

Significantly higher effective pupil lumens compare with HID Lamps

Tectonic uses patent heat sink design, results in effective thermal management

50,000 hours average High Power LED fixture life span

High Power Factor (>0.9)

Instant on/off

No UV, IR, mercury or sodium

Typical Applications

Warehouse

Manufacturing site

Floodlighting

Conference Centers

Gymnasium

Canopy

Food Processing

Cold Storage

Features:

Energy Matters
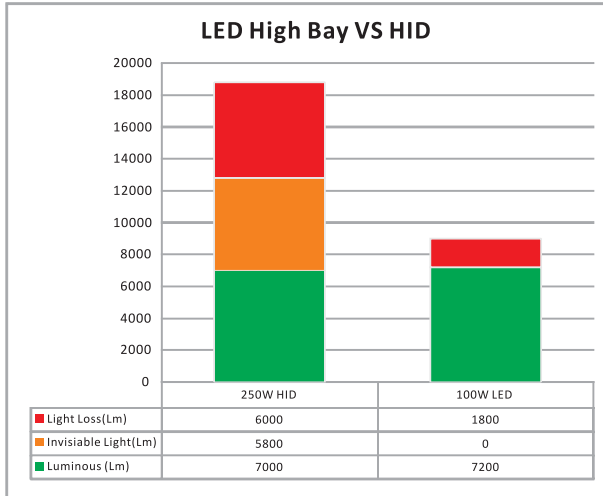
Luminaire Light Efficiency

LED High Bay VS HID

	250W HID	100W LED
Light Loss(Lm)	6000	1800
Invisiable Light(Lm)	5800	0
Luminous (Lm)	7000	7200

● 100W LED High Bay: equal visible light output of 250W HID.

Cost Savings

Cost of Ownership over 5 years

Cost of Owner Ship(USD$)

	250W HID High Bay	100W LED High Bay
Engergy Cost(USD)	76650	30660
Labour Cost(USD)	6000	2000
Application Cost(USD)	15000	21000
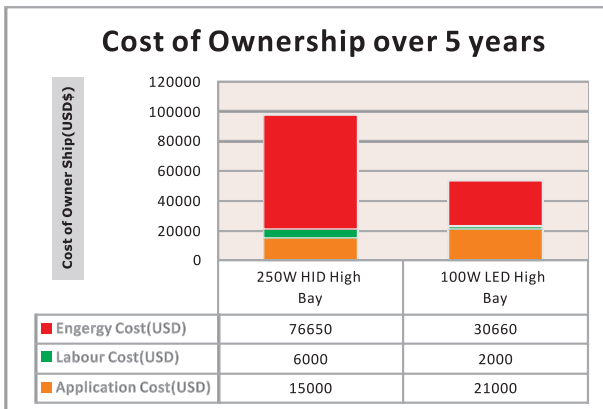
● **100 pcs 250W HID high bay lights could be replaced by 100 pcs Tectonic 100W LED High Bay lights.**
● **By having the lights on 7 Days/24Hrs, assume that each kWh cost 0.07USD in America, the LED high bay retrofit results in a total saving of over $34990 over a 5-year-period.**
● **The cost reduction of the lower power distribution and cabling requirements could also be noticed, by using LED High Bay.**
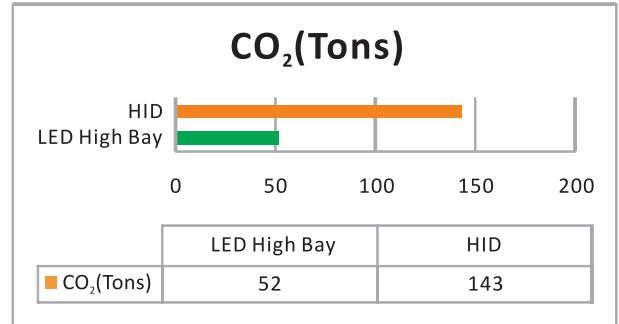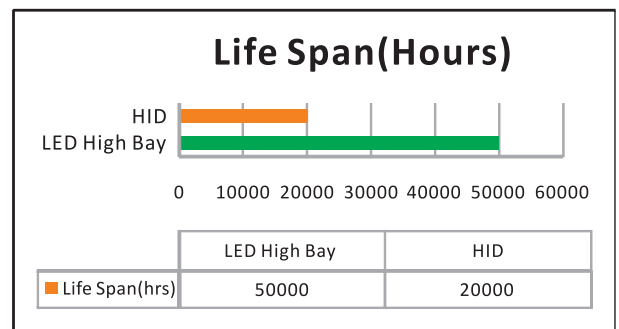
ROI

Return on Investment

Cost of Owner Ship(USD$)

	Installation	Year 1	Year 2	Year 3	Year 4	Year 5
250W HID High Bay	7000	22330	37660	59990	75320	97650
100W LED High Bay	23000	29132	35264	41396	47528	53660
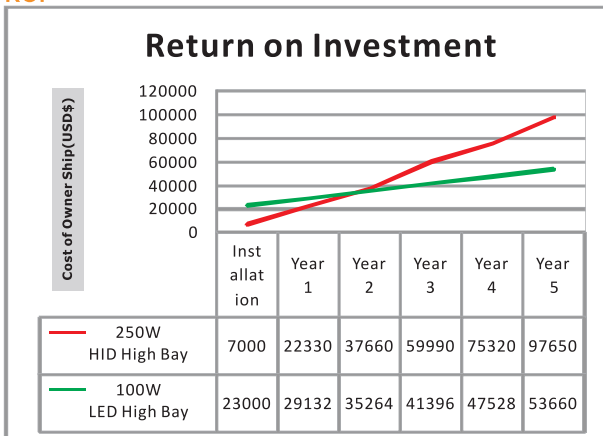
● Pay back in the second year.

Green Energy

Carbon Footprint

CO$_2$(Tons)

	LED High Bay	HID
CO$_2$(Tons)	52	143

● 63% energy and carbon reduction

Longevity

Life Span(Hours)

	LED High Bay	HID
Life Span(hrs)	50000	20000

● HID Lights need to be replaced each 2 years; 2 times of maintenance jobs are required over 5 years.

Independently certified in-situ temperature testing in conjunction with LM-80 tested LEDs provides Tectonic LED high bay lifetime more than 50,000 hours.

A sustainable mercury-free choice for warehouse, industrial and operation-critical applications, Tectonic LED lighting provides an energy-efficient and eco-friendly alternative to traditional light sources.

Intelligent Current Control: Each LED module can implement intelligent current control, whatever power network how to wave, it is able to achieve the precision constant current, ensure the LED can work under the secure current.

The Core of Tectonic High Bay

Patent Integration LED Chip from Citizen inside.

Thermal management

Tectonic thermal management technology stands out from various manufacturers by keeping effective heat dissipation which brings long life span up to 500,000+ hrs.

The heart of Tectonic LED High Bay

Strategy Partnership with Meanwell strengthens the power control and secures up to 90% high efficiency and low power consumption.

TSi-50-HB-N-B

- Up to 4000lm.
- Ideal replacement for 150W HID.
- 5-7 recommended hanghing height.
- 70-125 lux luminous intensity .

Height	Illuminate Radius	Illuminance
2m	2m	605Lux
3m	3m	300Lux
4m	4m	185Lux
5m	5m	125Lux
6m	6m	90Lux
7m	7m	70Lux
8m	8m	55Lux
9m	9m	40Lux
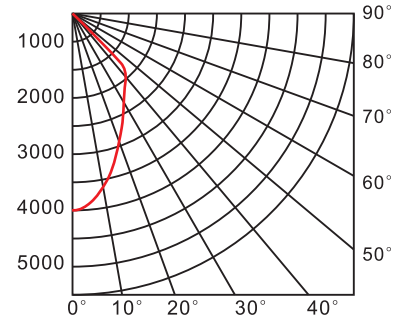
Type	Chip Type	Chip Qty	Watt(W)	Lm/W	Lumen(lm)	CRI(Ra)	Beam(°)	CCT(K)	Net Weight
TSi-50-HB-N-B	Bridgelux	50Wx1	50	65	3250	70	90	2700~7000	3.6kg±0.2kg

TSi-90-HB-VA-C

- Reach 80Lm/W.
- Up to 7800 lm.
- Ideal replacement for 250W HID.
- 8-11m recommended hanghing height.
- 70 to 115lux luminous intensity

Height	Illuminate Radius	Illuminance
5m	5m	250Lux
6m	6m	180Lux
7m	7m	135Lux
8m	8m	105Lux
9m	9m	80Lux
10m	10m	65Lux
11m	11m	55Lux
12m	12m	40Lux
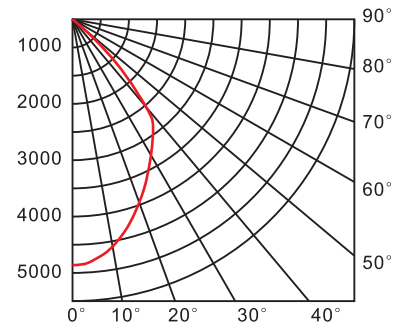
Type	Chip Type	Chip Qty	Watt(W)	Lm/W	Lumen(lm)	CRI(Ra)	Beam(°)	CCT(K)	Net Weight
TSi-90-HB-VA-C	Citizen	13Wx6	90	80	7200	72	90	2700~5500	4.8kg±0.2kg

TSi-100-HB-N-B

- Up to 7000lm.
- Ideal replacement for 250W HID.
- 8-10m recommended hanghing height.
- 70 to 115lux luminous intensity.

Height	Illuminate Radius	Illuminance
6m	6m	190Lux
7m	7m	150Lux
8m	8m	115Lux
9m	9m	90Lux
10m	10m	70Lux
11m	11m	60Lux
12m	12m	50Lux
13m	13m	40Lux
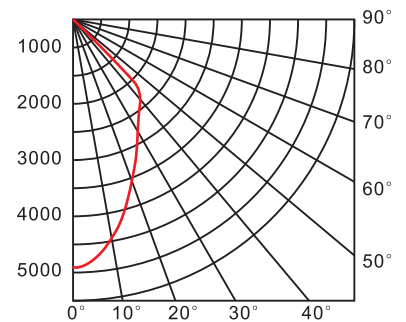
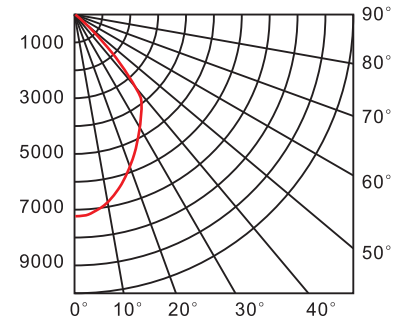| Type	Chip Type	Chip Qty	Watt(W)	Lm/W	Lumen(lm)	CRI(Ra)	Beam(°)	CCT(K)	Net Weight
TSi-100-HB-N-B	Bridgelux	100Wx1	100	65	6500	70	90	2700~7000	4.9kg±0.2kg

TSi-120-HB-VA-B

- Up to 8500 lm.
- Ideal replacement for 400W HID.
- 9-12m recommended hanghing height.
- 65 to 110lux luminous intensity.

Height	Illuminate Radius	Illuminance
8m	8m	150Lux
9m	9m	120Lux
10m	10m	100Lux
11m	11m	80Lux
12m	12m	70Lux
13m	13m	60Lux
14m	14m	50Lux
15m	15m	40Lux

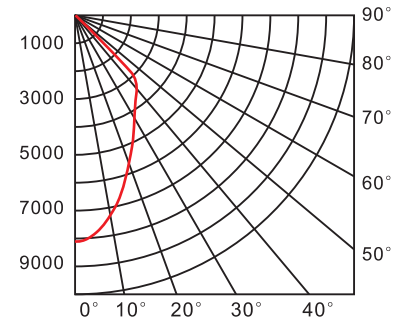| Type	Chip Type	Chip Qty	Watt(W)	Lm/W	Lumen(lm)	CRI(Ra)	Beam(°)	CCT(K)	Net Weight
TSi-120-HB-VA-B	Bridgelux	100Wx1	120	65	7850	70	90	2700~7000	6.1kg±0.2kg

TSi-120-HB-VA-C

- Reach 80Lm/W.
- Up to 10400 lm.
- Ideal replacement for 400W HID.
- 8-13m recommended hanghing height.
- 60 to 150lux luminous intensity.

Height	Illuminate Radius	Illuminance
8m	8m	155Lux
9m	9m	125Lux
10m	10m	105Lux
11m	11m	85Lux
12m	12m	75Lux
13m	13m	65Lux
14m	14m	55Lux
15m	15m	40Lux

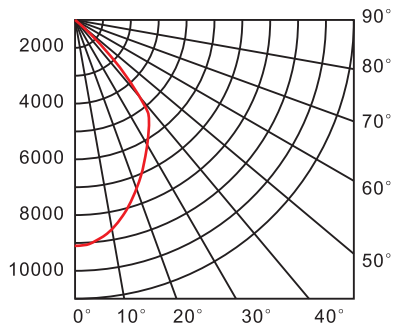| Type	Chip Type	Chip Qty	Watt(W)	Lm/W	Lumen(lm)	CRI(Ra)	Beam(°)	CCT(K)	Net Weight
TSi-120-HB-VA-C	Citizen	13Wx8	120	80	9600	72	90	2700~5500	5.8kg±0.3kg

TSi-150-HB-VA-B

- Up to 10000 lm.
- Ideal Ideal replacement forment for 400W HID.
- 10-14m recommended hanghing height.
- 60 to 120lux luminous intensity.

Height	Illuminate Radius	Illuminance
8m	8m	180Lux
9m	9m	145Lux
10m	10m	120Lux
11m	11m	95Lux
12m	12m	80Lux
13m	13m	70Lux
14m	14m	60Lux
15m	15m	40Lux

Type	Chip Type	Chip Qty	Watt(W)	Lm/W	Lumen(lm)	CRI(Ra)	Beam(°)	CCT(K)	Net Weight
TSi-150-HB-VA-B	Bridgelux	30Wx4	150	70	10500	70	90	2700~7000	8.0kg±0.4kg

TECTONIC

■ TSi-150-HB-VA-C

- Reach 80Lm/W.
- Up to 13000 lm.
- Ideal replacement for 400W HID.
- 9-14m recommended hanghing height.
- 60 to 140lux luminous intensity.

Height	Illuminate Radius	Illuminance
8m	8m	175Lux
9m	9m	140Lux
10m	10m	115Lux
11m	11m	90Lux
12m	12m	80Lux
13m	13m	70Lux
14m	14m	60Lux
15m	15m	50Lux
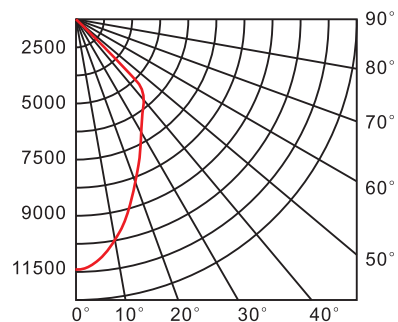
Type	Chip Type	Chip Qty	Watt(W)	Lm/W	Lumen(lm)	CRI(Ra)	Beam(°)	CCT(K)	Net Weight
TSi-150-HB-VA-C	Citizen	13Wx10	150	80	12000	72	90	2700~5500	6.5kg±0.3kg

■ TSi-180-HB-VA-C

- Reach 83Lm/W.
- Up to 16000 lm.
- Ideal replacement for 700W HID.
- 12-17m recommended hanghing height.
- 60 to 130lux luminous intensity.

Height	Illuminate Radius	Illuminance
10m	10m	185Lux
11m	11m	155Lux
12m	12m	130Lux
13m	13m	120Lux
14m	14m	95Lux
15m	15m	85Lux
16m	16m	75Lux
17m	17m	60Lux
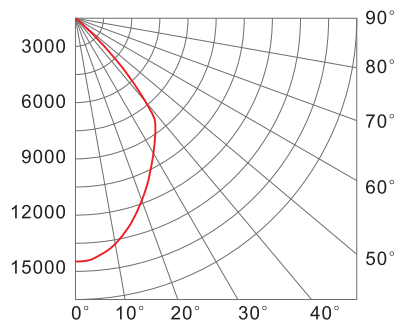
Type	Chip Type	Chip Qty	Watt(W)	Lm/W	Lumen(lm)	CRI(Ra)	Beam(°)	CCT(K)	Net Weight
TSi-180-HB-VA-C	Citizen	26Wx6	180	83	15000	72	90	2700~5500	8.0kg±0.4kg

■ TSi-200-HB-VA-B

- Up to 14000 lm.
- Ideal replacement for 700W HID.
- 12-16m recommended hanghing height.
- 70 to 125lux luminous intensity.

Height	Illuminate Radius	Illuminance
10m	10m	180Lux
11m	11m	150Lux
12m	12m	125Lux
13m	13m	115Lux
14m	14m	90Lux
15m	15m	80Lux
16m	16m	70Lux
17m	17m	50Lux
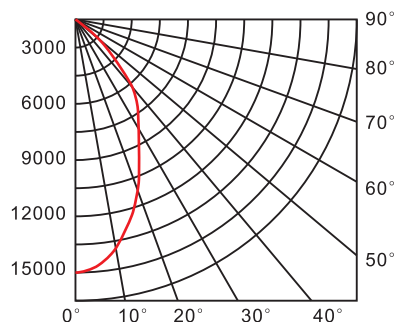
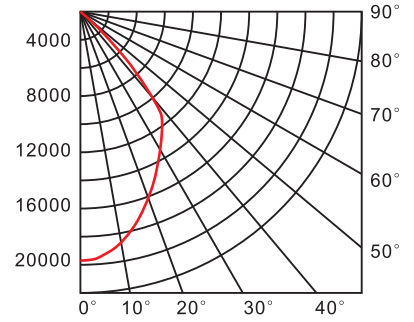| Type	Chip Type	Chip Qty	Watt(W)	Lm/W	Lumen(lm)	CRI(Ra)	Beam(°)	CCT(K)	Net Weight
TSi-200-HB-VA-B	Bridgelux	40Wx4	200	70	14000	70	90	2700~7000	10.5kg±0.4kg

TSi-240-HB-N-B

- Reach 84Lm/W.
- Up to 21500 lm.
- Ideal replacement for 1000W HID.
- 13-18m recommended hanghing height.
- 65 to 135lux luminous intensity.

Height	Illuminate Radius	Illuminance
11m	11m	170Lux
12m	12m	145Lux
13m	13m	135Lux
14m	14m	120Lux
15m	15m	110Lux
16m	16m	100Lux
17m	17m	80Lux
18m	18m	65Lux

Type	Chip Type	Chip Qty	Watt(W)	Lm/W	Lumen(lm)	CRI(Ra)	Beam(°)	CCT(K)	Net Weight
TSi-240-HB-VA-C	Citizen	26Wx8	240	84	20250	72	90	2700~5500	10.5kg±0.4kg

Ordering Information

Brand	Light Type	Voltage	Application	Heat Sink	Chip Type
TEC L	ID	100	HB	VA	C
TECTONIC Light	Industrial Device	50: 50W 90: 90W 100: 100W 120: 120W 150: 150W 180: 180W 200: 200W 240: 240W	High Bay	N: Dia159mm VA: Dia260mm	B: Bridgelux C: Citizen

Packing Information

Application Type	Luminaire Body	Reflector(10pcs)
TSi-50-HB-N-B	L340mm*W260mm*H260mm	L480mm*W480mm*H395mm
TSi-90-HB-VA-C	L340mm*W340mm*H360mm	L480mm*W480mm*H395mm
TSi-100-HB-B	L430mm*W260mm*H260mm	L480mm*W480mm*H395mm
TSi-120-HB-VA-B	L340mm*W340mm*H400mm	L480mm*W480mm*H395mm
TSi-120-HB-VA-C	L340mm*W340mm*H390mm	L480mm*W480mm*H395mm
TSi-150-HB-VA-B/TSi-180-HB-VA-C	L340mm*W340mm*H470mm	L480mm*W480mm*H395mm
TSi-150-HB-VA-C	L340mm*W340mm*H430mm	L480mm*W480mm*H395mm
TSi-200-HB-VA-B/TSi-HB-VA-C	L340mm*W340mm*H550mm	L480mm*W480mm*H395mm

Tectonic Opto Electronics, founded in 1996, is one of the global leading manufacturers for professional LED lighting. With 250000sqm overall floorage LED Industry Park, Tectonic Opto stands as one of the biggest group in LED Industry in Asia.

Tectonic Opto Electronics Co

**15 Years experience in LED Lighting Application
Management System Qualified by ISO9001 and ISO 14001
Products certified by CE, RoHs, UL, ETL and PSE etc
OEM, ODM LED Products**

CE FC RoHs ETL UL LKAS BM TRADA ISO9001:2008 BM TRADA ISQT4001:2004

Tectonic Optoelectronics Co., Ltd
Tectonic LED Corp. USA