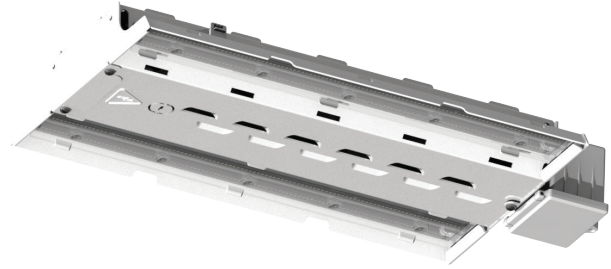




High Bay



Product information

The new Tungsram High Bay LED luminaire is an exceptional mixture of value and performance. The product range has been upgraded to reach very high efficacy up to 177 lm/w and cover lumen packages between 10,000 – 60,000 lumens. The range includes DALI and various sensor versions, such as the Nedap Luxon IoT Node, to enable internet connection and wireless control of the luminaire range. With the improved efficacy, wide range of control options and higher lumen output, the High Bay is an ideal choice to replace high watt HID and T5/T8 LFL fixtures in high bay and low bay applications, in industrial and commercial buildings.

Applications

- Designed to meet recommended luminance and illuminance requirements for High bay and Low bay applications

Application areas



Warehouses
Production halls



Sports halls



Logistics



Airplan hangars

Housing

- Combination of steel and aluminium housing
- High Bay Series' design accommodates 1 or 2 modules with 2 LED units per module
- IK08 protection level for Fix output and DALI versions.
- IK02 for sensor types, IK03 for Emergency version.

Controls

- Available with various driver and sensor options.
- All DALI drivers use DALI1 protocol.
- Sensors working frequency is 5.8Ghz.
- Transmitting data on the same frequency band in close proximity to the installation of sensor products may cause potential interferences.
- 1H25, 2H30, 1S22 and 1S30 has 2 drivers, DALI versions have 2 DALI addresses.
- Motion & lux sensor – enables standalone fixture control up to 12m
- (Radio Frequency) sensor in a local lighting control system grid without additional DALI wires, up to 12m installation height. Can be used with High (H) and Standard (S) series as well.

Finish

- Painted white finish with standard color: RAL 9016

Mounting

- Cable or bracket mounting.

Emergency Option

- Emergency mode is optional ('EA' in order logic/options 1)
- Emergency versions are assembled with Tridonic Converter Kit (EM converter LED ST 200 V). Tridonic battery pack can provide EM lighting for 3 hours duration.
- Battery can provide EM lighting for 3 hours duration & min. 800lm
- Emergency Lighting LED Driver has self-test function as per IEC 62034
- For all Emergency versions the max Ta is 25 °C

LED & Optical Assembly

- IP50 protection level for the optical compartment for all lenses - 30, 60 and 90 degree optics are dust protected.
- TU HB Series optical system enables LEDs to provide optimised illumination for open floor and racked aisles with photometric distributions of 30, 60 and 90 degrees achieved with Lenses (L). Optics are designed for commercial & industrial applications where mounting height, fixture spacing & light levels help determine optical selection.
- A high performance product utilising top performing LED chips with three MacAdam steps, offering exceptional reliability.
- 4000K & 5000K versions with 70 & 80 CRI.

Electrical

- 220-240V/50-60Hz
- System power factor is >90% and THD <20%
- All package includes 1m long pre-cable

Order Logic

Product ID	Module / Efficiency / Lumen	CCT / CRI	Optic	Control	Options1
TU High bay - High efficiency					
TU HB IP20 G1	1H10 - 1M High 10klm	4K - 4000K 70 CRI70	C1 - 120° Clear	DL - DALI RF - sensor (Motion and Lux)	ST - Standard EA - EM Auto - test
	1H15 - 1M High 15klm		D1 - 100° Diffuse		
	1H20 - 1M High 20klm	5K - 5000K 70 CRI70	U1 - 80° Diffuse		
	1H25 - 1M High 25klm	4K - 4000K 80 CRI80	L9 - 90° Clear		
	2H30 - 2M High 30klm	5K - 5000K 80 CRI80	L6 - 60° Clear		
	2H45 - 2M High 45klm		L3 - 30° Clear		
TU High bay - Standard Efficiency					
TU HB IP20 G1	1S10 - 1M Std 10klm	4K - 4000K 70 CRI70	C1 - 120° Clear	FX - Fix output DL - DALI SN - Sensor (On / OFF) RF - sensor (Motion and Lux)	ST - Standard EA - EM auto - test
	1S12 - 1M Std 12 klm		D1 - 100° Diffuse		
	1S20 - 1M Std 20klm	5K - 5000K 70 CRI70	L9 - 90° Clear		
	1S22 - 1M Std 22 klm	4K - 4000K 80 CRI80	L6 - 60° Clear		
	1S30 - 1M Std 30klm	5K - 5000K 80 CRI80	L3 - 30° Clear		
	2S60 - 2M Std 60klm				

		4000 K				5000 K				L80B50	Regulatory Mark		
		70 CRI		80 CRI		70 CRI		80 CRI		25°C *			
W	LM	LM/W	LM	LM/W	LM	LM/W	LM	LM/W	Lumen maintenance				
Constant Output (FX) & Dimmable Output (DL)													
FX	DL	1S10	67	9280	139	9180	137	9670	144	9280	139	238000	CE
FX	DL	1S12	92	12900	140	12800	139	13500	147	12900	140	149000	CE
FX	DL	1S20	141	19100	135	18900	134	19900	141	19100	135	149000	CE
FX	DL	1S22	162	22500	139	22300	138	23500	145	22500	139	93000	CE
FX	DL	1S30	199	27100	136	26800	135	28300	142	27100	136	93000	CE
FX	-	2S60	435	57600	132	57000	131	60000	138	57600	132	72000	CE
-	DL	1H10	56	9500	170	9400	168	9900	177	9500	170	116000	CE
-	DL	1H15	86	14400	167	14200	165	15000	174	14400	167	116000	CE
-	DL	1H20	116	18700	161	18500	159	19500	168	18700	161	116000	CE
-	DL	1H25	155	24000	155	23700	153	25000	162	24000	155	88000	CE
-	DL	2H30	170	28000	165	27700	163	29200	172	28000	165	116000	CE
-	DL	2H45	272	43300	159	42900	158	45200	166	43300	159	94000	CE
Motion Sensor (SN) & Radio Frequency Sensor (RF)													
SN	RF	1S10	69	9280	135	9180	134	9670	141	9280	135	238000	CE
SN	RF	1S12	94	12900	138	12800	137	13500	144	12900	138	149000	CE
SN	RF	1S20	143	19100	134	18900	132	19900	139	19100	134	149000	CE
SN	RF	1S22	164	22500	137	22300	136	23500	144	22500	137	93000	CE
SN	RF	1S30	201	27100	135	26800	134	28300	141	27100	135	93000	CE
SN	-	2S60	437	57600	132	57000	131	60000	137	57600	132	72000	CE
-	RF	1H10	58	9500	165	9400	163	9900	172	9500	165	116000	CE
-	RF	1H15	88	14400	164	14200	162	15000	171	14400	164	116000	CE
-	RF	1H20	118	18700	159	18500	157	19500	166	18700	159	105000	CE
-	RF	1H25	156	24000	154	23700	152	25000	160	24000	154	88000	CE
-	RF	2H30	172	28000	163	27700	161	29200	170	28000	163	116000	CE
-	RF	2H45	274	43300	158	42900	157	45200	165	43300	158	94000	CE

*Remote controller need to be ordered separately, SKU93110511

W	4000 K				5000 K				L80B50	Regulatory Mark
	70 CRI		80 CRI		70 CRI		80 CRI		25°C *	
	LM	LM/W	LM	LM/W	LM	LM/W	LM	LM/W	Lumen maintenance	

Nedap IoT (NL)

NL	-	1H10	57	9500	167	9400	165	9900	174	9500	167	116000	CE
NL	-	1H15	87	14400	166	14200	163	15000	172	14400	166	116000	CE
NL	-	1H20	117	18700	160	18500	158	19500	167	18700	160	106000	CE
NL	-	1H25	156	24000	154	23700	152	25000	161	24000	154	90000	CE
NL	-	2H30	171	28000	164	27700	162	29200	171	28000	164	116000	CE
NL	-	2H45	273	43300	159	42900	157	45200	166	43300	159	93000	CE

Emergency (EA)

FX	-	1S20	145	19100	132	18900	130	19900	137	19100	132	150000	CE
-	DL	1H20	120	18700	156	18500	154	19500	163	18700	156	106000	CE
-	RF	1H20	159	24000	151	23700	149	25000	158	24000	151	88000	CE
-	DL	1H25	122	18700	154	18500	152	19500	160	18700	154	105000	CE
-	RF	1H25	160	24000	150	23700	148	25000	156	24000	150	88000	CE
NL	-	1H25	160	24000	150	23700	148	25000	157	24000	150	90000	CE

Optical multipliers**

C1	100%
D1	90%
U1	93,5%
L9	100%
L6	99,7%
L3	105,3%

Our products are in compliance with IEC 60598-2-1:1979+A1:1987 used in conjunction with IEC 60598-1:2014.

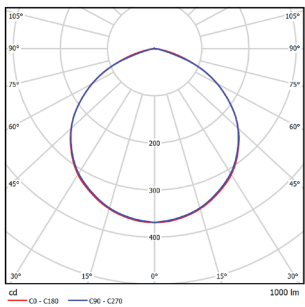
*any other lumen maintenance value upon request

**all lumen values have been measured with C1 optics, in any other case please use the optical multipliers

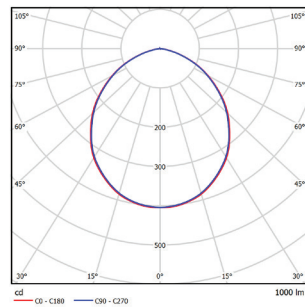
	Life time standard efficiency [h]	Life time High efficiency [h]
L80B10	45-137K*	74-98 K*
L90B10	20-67 K	32-42K
L80B20	53-167 K	81-103 K
L90B20	23-81 K	34-45K
L80B50	72-238 K	94-116 K
L90B50	30-115 K	40-50 K

* Depending on variant

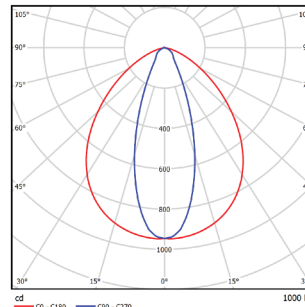
Photometric data



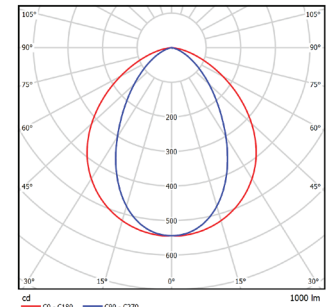
C1



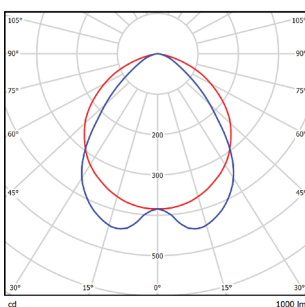
D1



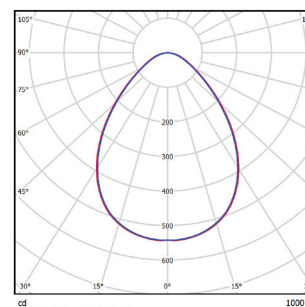
L3



L6



L9



U1

UGR value

Values depending on lumen package and installation details.

	Standard efficiency	High efficiency
C1	26-30	26-29
D1	25-30	25-29
D1	23-27	23-26
U1	20-30	20-29
L3	18-30	18-29
L9	22-30	22-29

Mounting & Accessories

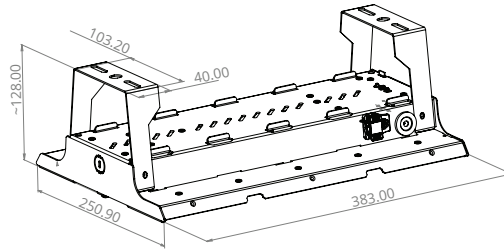
Mounting Options

Image

Accessories

Rod Mount (optional)

Available on all fixture configurations. Attaches to M10 threaded rod (rod and nuts not included).

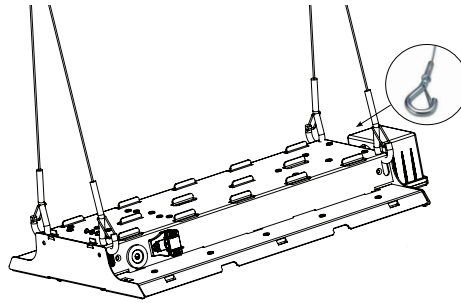


TU HB Bracket kit **93108564**
2 pcs / kit

TUHB Bracket kit **93116762**
20 pcs / 10 kits

Y-Cable w/hook (optional)

Use with Standard Mounting Option only. Order separately. Sold per pair - suitable for one fixture 1.5 m, 3 m, 4.5 m, 6 m lengths available.



93118332
1500MM Y-CABLE HOOK PAIR
FOR HIGH BAY 52

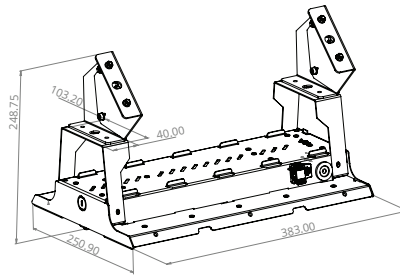
93118333
3000MM Y-CABLE HOOK PAIR
FOR HIGH BAY 52

93118334
4500MM Y-CABLE HOOK PAIR
FOR HIGH BAY 52

93118335
6000MM Y-CABLE HOOK PAIR
FOR HIGH BAY 52

Tilted bracket kit (optional)

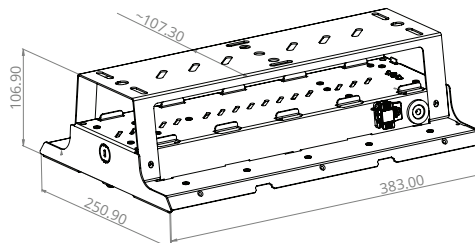
Available on all fixture configurations. Kit needs to be ordered separately. The angle is adjustable from 0°- 45° in 5° steps.



93104725
Using tilted brackets - 2 pcs / kit - the Rod Mount TUHB bracket kit has to be ordered as well.

Busbar bracket kit (optional)

Available on all fixture configurations. Kit needs to be ordered separately.

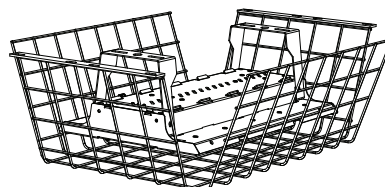


93116910
TU HB lighting busbar bracket kit - single pack

93116861
TU HB lighting busbar bracket kit - 5 pack

IK10 protective cover (optional)

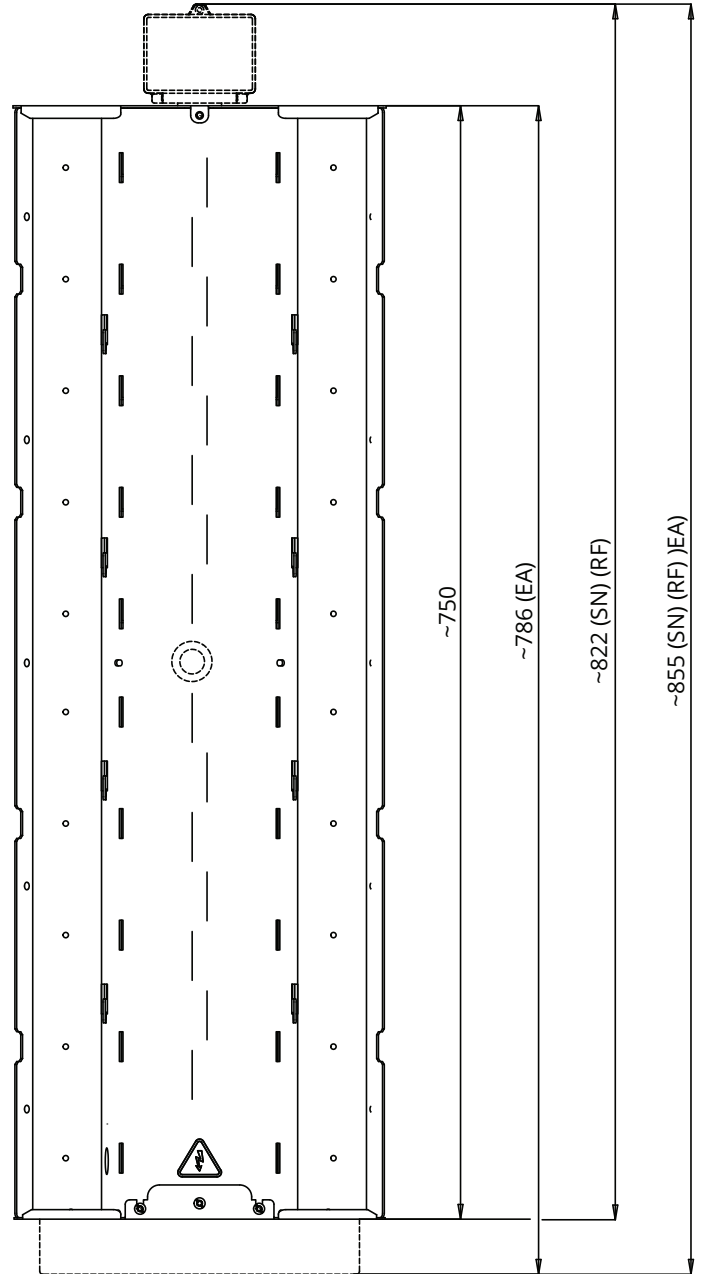
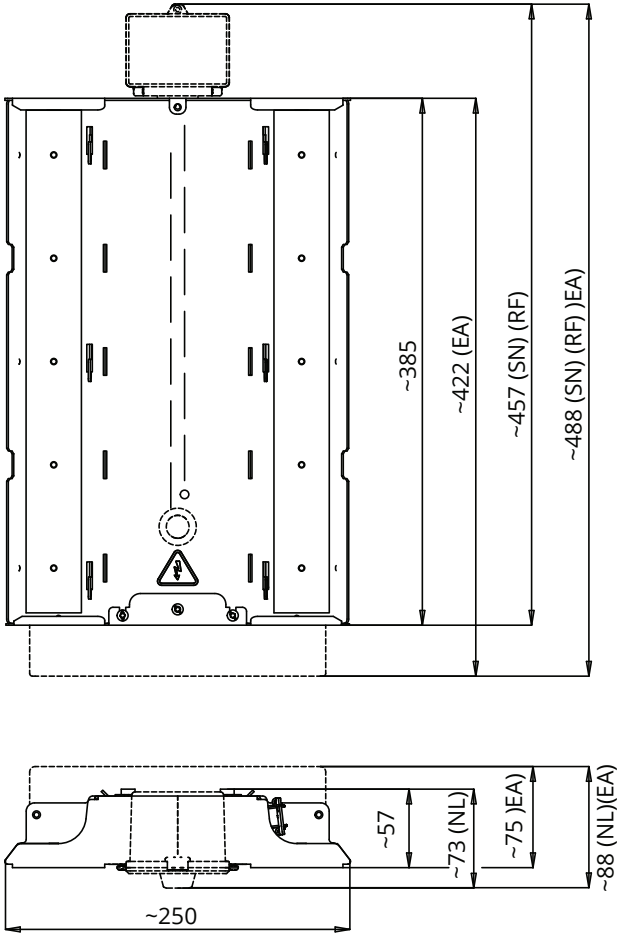
Order separately. Protect the fixture from strong mechanical effect. Only available for FX and DL versions.



93118740
PROTECTIVE GRILLE IP20 1M INHS -
1 module size

93118741
PROTECTIVE GRILLE IP20 2M INHS -
2 modules size

Dimensions (mm)



Module	* Weight
1	2 kg
2	4 kg

* Emergency version weight additional 1 kg