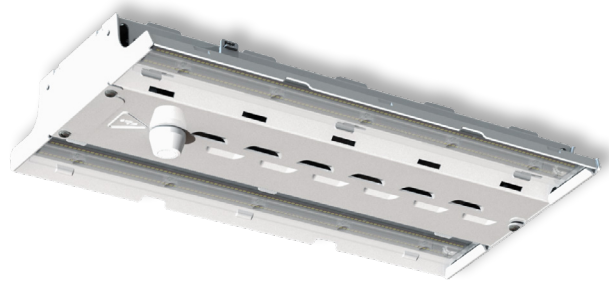


High Bay Luxon IoT Node



IP20 IK08

Product information

The high performing Tungstram High Bay industrial fixture range is equipped with a Nedap Luxon IoT Node to allow wireless control of the luminaire range. The TU HB range has been upgraded to reach very high efficacy of 174 lm/w and cover lumen packages between 9 000 - 29 200 lumens. This new range is ideal 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

Housing

- Robust extruded aluminium bodyThe new TU HB series accommodates 1 or 2 modules with 2 LED strips per module
- IK08 rating

Ratings - IP20

- Temperature Rated at -30°C to +50°C
- 1H10 - L80B50 >115 000 @Ta 25C
- 1H10 - L80B50 > 100 000 @ Ta 50C
- 1H20 - L80B50 > 100 000 @ Ta 25C
- 1H20 - L80B50 > 82 000 @ Ta 50C
- 2H30 - L80B50 > 105 000 @ Ta 25C
- 2H30 - L80B50 > 92 000 @ Ta 25C

Mounting

- Various mounting options: Y-cable, threaded or tilted rod kit. Mounting accessories need to be ordered separately.

Electrical

- 220-240V/50-60Hz
- System power factor is >90% and THD <20%

Sensors

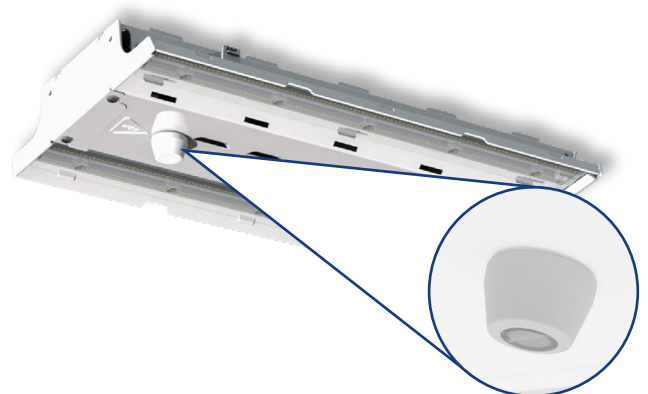
- Lux sensor integrated

Finish

- Painted white finish, RAL 9016

Controls

- Equipped with Nedap Luxon IoT node and best in class Sensor Ready driver.



LED & Optical Assembly

- TU HB Series optical system enable LEDs to provide optimized illumination for open floor and racked aisles with photometric distributions of 30, 60, 90 and 120 degrees.
- Utilizing high performance Nichia LED chips offering exceptional reliability.
- 4000K & 5000K versions
- 70 & 80 CRI options

Smart Lighting

The NEDAP Luxon IoT allows you to have a wirelessly connected lighting system, this enables easy control locally or centrally using a cloud based system.

The below aid to grow energy saving over time, cut operation costs over time and flexibility within your lighting design

- Daylight harvesting
- High end trim
- Time scheduling
- Motion control
- Button control

Benefits to the Luxon Node and Nedap system: Single cloud dashboard to manage and oversee all your locations Remote access and real-time insights into any of your luminaires Built-in functionality to receive real-time error notifications Intuitive scene control to easily adapt desired lighting behaviour Stunning energy savings reports and benchmarking options Module for automated testing and reporting of emergency lights Data exports and 3rdparty systems integration Free software & security upgrades Ultimate flexibility with the LuxonSwitch App for manual overrides Designed to be easy

Luxon Fundamentals

Manage and adjust your lighting online from anywhere, anytime Maximize energy savings through motion, daylight and time control Clear visual overview and floorplan of your lighting installation, Flexibility for your luminaire groupings and behaviour Monitor the system status quickly and securely Receive software updates periodically Technical support just a phone call away Remote support by Nedap Luxon partners if needed

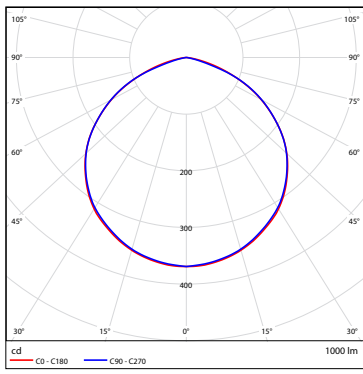
Order Logic

Product ID	Module / Efficiency / Lumen	CCT / CRI	Optic	Control	Options ¹
TU High bay IP20 - NEDAP IoT Node					
TU HB IP20 G1	1H10 - 1M High 10klm 1H15 - 1M High 15klm 1H20 - 1M High 20klm 1H25 - 1M High 25klm 2H30 - 2M High 30klm	4K-4000K 70 CRI70 5K-5000K 70 CRI70 4K-4000K 80 CRI80 5K-5000K 80 CRI80	C1-120° Clear D1-120° Diffuse L9-90° Clear L6-60° Clear L3-30° Clear	NL-Nedap Luxon	ST-Standard

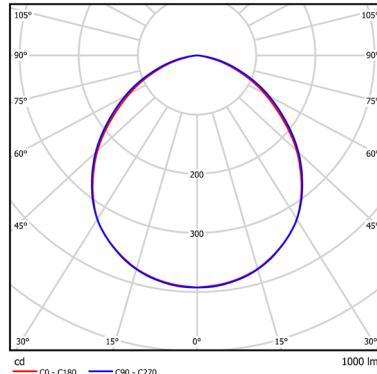
Module / Efficiency / Lumen	5000K 70CRI Clear 120° Optics DALI Driver				CCT/CRI multipliers		Optical multipliers	
	Module	Power(W)	Lumen	lm/W				
1H10	1	56	9900	177	5K70	100%	C1	96%
1H15	1	86	15000	174	5K80	96%	D1	95%
1H20	1	116	19500	168	4K70	96%	L9	100%
1H25	1	148	25000	167	4K80	95%	L6	101%
2H30	2	170	29200	172			L3	103%

1H15 and 2H15 versions are available from May.

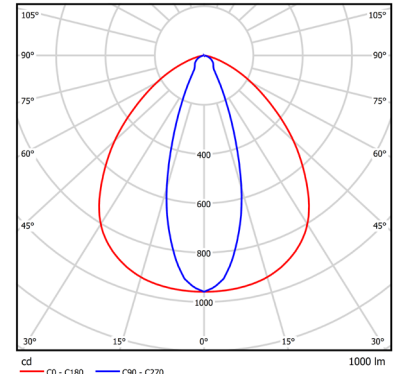
Photometric data - IP20



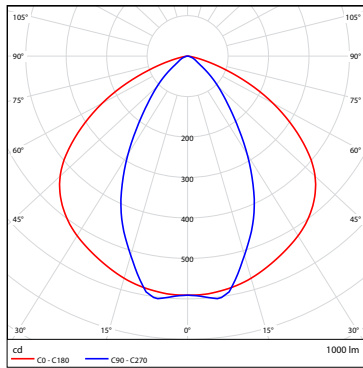
C1



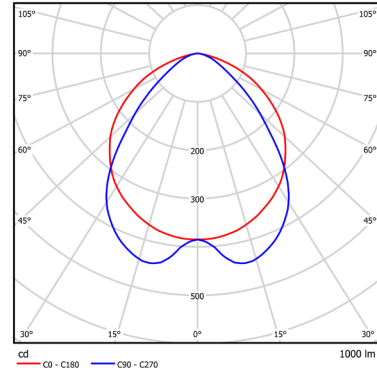
D1



L3



L6



L9

Photometry is based on LM79.

OPTIC TYPE	MOUNTING HEIGHT	SPACE TYPE
120° Clear Optic (C1)	Any	Open Floor Plan
60° Lens Optic (L6)	Any	Low or High Bay Racked Aisles
90° Clear Optic (L9)	Any	Open Floor Plan
30° Clear Optic	Any	High Bay Racked Aisles
120° Diffused Optic (D1)	Below 6 meter	Open Floor Plan

Photometric selection by application

The new TU HB series optical system enables LEDs to provide precise illumination where needed. Optics are designed for commercial & industrial applications where mounting height, fixture spacing & light levels help determine optical selection. The above table outlines the photometric options and suggested application. Consult our sales team specific project layouts.

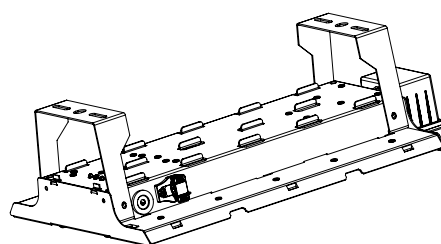
Mounting & Accessories

Mounting Options

Rod Mount (optional)

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

Image

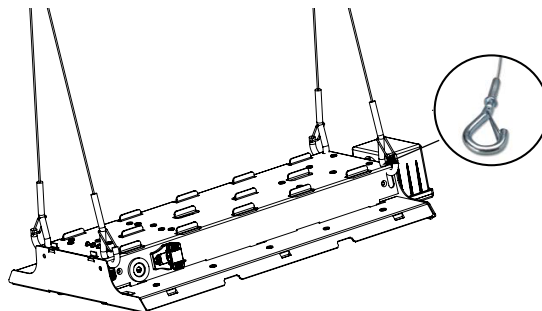


Accessories

THB IP20 Bracket kit **93108564***
*2pcs/KIT

Y-Cable w/hook (optional)

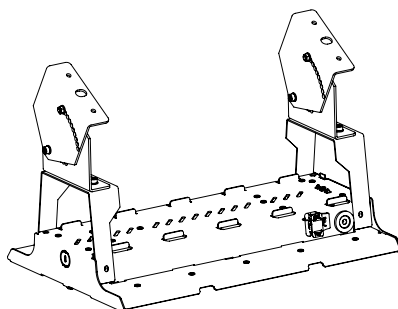
Use with Standard Mounting Option only.
Order separately. Sold per pair - suitable for one fixture 1.5 m, 3 m, 4.5 m, 6 m lengths available.



- 1.5 m cable
YCABLEHOOK05FTPAIR - 5 FOOT GRIPPLE PAIR 5 FT
- 3 m cable
YCABLEHOOK10FTPAIR - 10 FOOT GRIPPLE PAIR
- 4.5 m cable
YCABLEHOOK15FTPAIR - 15 FOOT GRIPPLE PAIR
- 6 m cable
YCABLEHOOK20FTPAIR - 20 FT GRIPPLE PAIR 20FT

Tilted bracket kit

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



- THB IP20 Tilted bracket kit
93104725*
- * 2 pcs/kit

Specification summary

Description	Modules	Wattage (W)	CCT (K)	Initial Lumens (lm)	CRI (Ra)	System Efficacy (lm/W)	Optic
TU HB IP20 G1 1 H 10 4K 70 120° Clear NL ST	1	57	4,000	9,504	70	167	120° Clear
TU HB IP20 G1 1 H 10 4K 80 120° Clear NL ST	1	57	4,000	9,405	80	165	120° Clear
TU HB IP20 G1 1 H 10 5K 70 120° Clear NL ST	1	57	5,000	9,900	70	174	120° Clear
TU HB IP20 G1 1 H 10 5K 80 120° Clear NL ST	1	57	5,000	9,504	80	167	120° Clear
TU HB IP20 G1 1 H 10 4K 70 120° Diffuse NL ST	1	57	4,000	9,124	70	160	120° Diffuse
TU HB IP20 G1 1 H 10 4K 80 120° Diffuse NL ST	1	57	4,000	9,029	80	158	120° Diffuse
TU HB IP20 G1 1 H 10 5K 70 120° Diffuse NL ST	1	57	5,000	9,504	70	167	120° Diffuse
TU HB IP20 G1 1 H 10 5K 80 120° Diffuse NL ST	1	57	5,000	9,124	80	160	120° Diffuse
TU HB IP20 G1 1 H 10 4K 70 30° Clear NL ST	1	57	4,000	9,789	70	172	30° Clear
TU HB IP20 G1 1 H 10 4K 80 30° Clear NL ST	1	57	4,000	9,687	80	170	30° Clear
TU HB IP20 G1 1 H 10 5K 70 30° Clear NL ST	1	57	5,000	10,197	70	179	30° Clear
TU HB IP20 G1 1 H 10 5K 80 30° Clear NL ST	1	57	5,000	9,789	80	172	30° Clear
TU HB IP20 G1 1 H 10 4K 70 60° Clear NL ST	1	57	4,000	9,599	70	168	60° Clear
TU HB IP20 G1 1 H 10 4K 80 60° Clear NL ST	1	57	4,000	9,499	80	167	60° Clear
TU HB IP20 G1 1 H 10 5K 70 60° Clear NL ST	1	57	5,000	9,999	70	175	60° Clear
TU HB IP20 G1 1 H 10 5K 80 60° Clear NL ST	1	57	5,000	9,599	80	168	60° Clear
TU HB IP20 G1 1 H 10 4K 70 90° Clear NL ST	1	57	4,000	9,504	70	167	90° Clear
TU HB IP20 G1 1 H 10 4K 80 90° Clear NL ST	1	57	4,000	9,405	80	165	90° Clear
TU HB IP20 G1 1 H 10 5K 70 90° Clear NL ST	1	57	5,000	9,900	70	174	90° Clear
TU HB IP20 G1 1 H 10 5K 80 90° Clear NL ST	1	57	5,000	9,504	80	167	90° Clear
TU HB IP20 G1 1 H 15 4K 70 120° Clear NL ST	1	86	4,000	14,400	70	167	120° Clear
TU HB IP20 G1 1 H 15 4K 80 120° Clear NL ST	1	86	4,000	14,250	80	166	120° Clear
TU HB IP20 G1 1 H 15 5K 70 120° Clear NL ST	1	86	5,000	15,000	70	174	120° Clear
TU HB IP20 G1 1 H 15 5K 80 120° Clear NL ST	1	86	5,000	14,400	80	167	120° Clear
TU HB IP20 G1 1 H 15 4K 70 120° Diffuse NL ST	1	86	4,000	13,824	70	161	120° Diffuse
TU HB IP20 G1 1 H 15 4K 80 120° Diffuse NL ST	1	86	4,000	13,680	80	159	120° Diffuse
TU HB IP20 G1 1 H 15 5K 70 120° Diffuse NL ST	1	86	5,000	14,400	70	167	120° Diffuse
TU HB IP20 G1 1 H 15 5K 80 120° Diffuse NL ST	1	86	5,000	13,824	80	161	120° Diffuse
TU HB IP20 G1 1 H 15 4K 70 30° Clear NL ST	1	86	4,000	14,832	70	172	30° Clear

TU HB IP20 G1 1 H 15 4K 80 30° Clear NL ST	1	86	4,000	14,678	80	171	30° Clear
TU HB IP20 G1 1 H 15 5K 70 30° Clear NL ST	1	86	5,000	15,450	70	180	30° Clear
TU HB IP20 G1 1 H 15 5K 80 30° Clear NL ST	1	86	5,000	14,832	80	172	30° Clear
TU HB IP20 G1 1 H 15 4K 70 60° Clear NL ST	1	86	4,000	14,544	70	169	60° Clear
TU HB IP20 G1 1 H 15 4K 80 60° Clear NL ST	1	86	4,000	14,393	80	167	60° Clear
TU HB IP20 G1 1 H 15 5K 70 60° Clear NL ST	1	86	5,000	15,150	70	176	60° Clear
TU HB IP20 G1 1 H 15 5K 80 60° Clear NL ST	1	86	5,000	14,544	80	169	60° Clear
TU HB IP20 G1 1 H 15 4K 70 90° Clear NL ST	1	86	4,000	14,400	70	167	90° Clear
TU HB IP20 G1 1 H 15 4K 80 90° Clear NL ST	1	86	4,000	14,250	80	166	90° Clear
TU HB IP20 G1 1 H 15 5K 70 90° Clear NL ST	1	86	5,000	15,000	70	174	90° Clear
TU HB IP20 G1 1 H 15 5K 80 90° Clear NL ST	1	86	5,000	14,400	80	167	90° Clear
TU HB IP20 G1 1 H 20 4K 70 120° Clear NL ST	1	117	4,000	18,720	70	160	120° Clear
TU HB IP20 G1 1 H 20 4K 80 120° Clear NL ST	1	117	4,000	18,525	80	158	120° Clear
TU HB IP20 G1 1 H 20 5K 70 120° Clear NL ST	1	117	5,000	19,500	70	167	120° Clear
TU HB IP20 G1 1 H 20 5K 80 120° Clear NL ST	1	117	5,000	18,720	80	160	120° Clear
TU HB IP20 G1 1 H 20 4K 70 120° Diffuse NL ST	1	117	4,000	17,971	70	154	120° Diffuse
TU HB IP20 G1 1 H 20 4K 80 120° Diffuse NL ST	1	117	4,000	17,784	80	152	120° Diffuse
TU HB IP20 G1 1 H 20 5K 70 120° Diffuse NL ST	1	117	5,000	18,720	70	160	120° Diffuse
TU HB IP20 G1 1 H 20 5K 80 120° Diffuse NL ST	1	117	5,000	17,971	80	154	120° Diffuse
TU HB IP20 G1 1 H 20 4K 70 30° Clear NL ST	1	117	4,000	19,282	70	165	30° Clear
TU HB IP20 G1 1 H 20 4K 80 30° Clear NL ST	1	117	4,000	19,081	80	163	30° Clear
TU HB IP20 G1 1 H 20 5K 70 30° Clear NL ST	1	117	5,000	20,085	70	172	30° Clear
TU HB IP20 G1 1 H 20 5K 80 30° Clear NL ST	1	117	5,000	19,282	80	165	30° Clear
TU HB IP20 G1 1 H 20 4K 70 60° Clear NL ST	1	117	4,000	18,907	70	162	60° Clear
TU HB IP20 G1 1 H 20 4K 80 60° Clear NL ST	1	117	4,000	18,710	80	160	60° Clear
TU HB IP20 G1 1 H 20 5K 70 60° Clear NL ST	1	117	5,000	19,695	70	168	60° Clear
TU HB IP20 G1 1 H 20 5K 80 60° Clear NL ST	1	117	5,000	18,907	80	162	60° Clear
TU HB IP20 G1 1 H 20 4K 70 90° Clear NL ST	1	117	4,000	18,720	70	160	90° Clear
TU HB IP20 G1 1 H 20 4K 80 90° Clear NL ST	1	117	4,000	18,525	80	158	90° Clear
TU HB IP20 G1 1 H 20 5K 70 90° Clear NL ST	1	117	5,000	19,500	70	167	90° Clear
TU HB IP20 G1 1 H 20 5K 80 90° Clear NL ST	1	117	5,000	18,720	80	160	90° Clear
TU HB IP20 G1 1 H 25 4K 70 120° Clear NL ST	1	148	4,000	24,000	70	162	120° Clear
TU HB IP20 G1 1 H 25 4K 80 120° Clear NL ST	1	148	4,000	23,750	80	160	120° Clear
TU HB IP20 G1 1 H 25 5K 70 120° Clear NL ST	1	148	5,000	25,000	70	169	120° Clear
TU HB IP20 G1 1 H 25 5K 80 120° Clear NL ST	1	148	5,000	24,000	80	162	120° Clear
TU HB IP20 G1 1 H 25 4K 70 120° Diffuse NL ST	1	148	4,000	23,040	70	156	120° Diffuse
TU HB IP20 G1 1 H 25 4K 80 120° Diffuse NL ST	1	148	4,000	22,800	80	154	120° Diffuse
TU HB IP20 G1 1 H 25 5K 70 120° Diffuse NL ST	1	148	5,000	24,000	70	162	120° Diffuse
TU HB IP20 G1 1 H 25 5K 80 120° Diffuse NL ST	1	148	5,000	23,040	80	156	120° Diffuse
TU HB IP20 G1 1 H 25 4K 70 30° Clear NL ST	1	148	4,000	24,720	70	167	30° Clear
TU HB IP20 G1 1 H 25 4K 80 30° Clear NL ST	1	148	4,000	24,463	80	165	30° Clear
TU HB IP20 G1 1 H 25 5K 70 30° Clear NL ST	1	148	5,000	25,750	70	174	30° Clear
TU HB IP20 G1 1 H 25 5K 80 30° Clear NL ST	1	148	5,000	24,720	80	167	30° Clear
TU HB IP20 G1 1 H 25 4K 70 60° Clear NL ST	1	148	4,000	24,240	70	164	60° Clear
TU HB IP20 G1 1 H 25 4K 80 60° Clear NL ST	1	148	4,000	23,988	80	162	60° Clear
TU HB IP20 G1 1 H 25 5K 70 60° Clear NL ST	1	148	5,000	25,250	70	171	60° Clear
TU HB IP20 G1 1 H 25 5K 80 60° Clear NL ST	1	148	5,000	24,240	80	164	60° Clear
TU HB IP20 G1 1 H 25 4K 70 90° Clear NL ST	1	148	4,000	24,000	70	162	90° Clear
TU HB IP20 G1 1 H 25 4K 80 90° Clear NL ST	1	148	4,000	23,750	80	160	90° Clear
TU HB IP20 G1 1 H 25 5K 70 90° Clear NL ST	1	148	5,000	25,000	70	169	90° Clear
TU HB IP20 G1 1 H 25 5K 80 90° Clear NL ST	1	148	5,000	24,000	80	162	90° Clear
TU HB IP20 G1 2 H 30 4K 70 120° Clear NL ST	2	171	4,000	28,032	70	164	120° Clear
TU HB IP20 G1 2 H 30 4K 80 120° Clear NL ST	2	171	4,000	27,740	80	162	120° Clear
TU HB IP20 G1 2 H 30 5K 70 120° Clear NL ST	2	171	5,000	29,200	70	171	120° Clear
TU HB IP20 G1 2 H 30 5K 80 120° Clear NL ST	2	171	5,000	28,032	80	164	120° Clear

TU HB IP20 G1 2 H 30 4K 70 120° Diffuse NL ST	2	171	4,000	26,911	70	157	120° Diffuse
TU HB IP20 G1 2 H 30 4K 80 120° Diffuse NL ST	2	171	4,000	26,630	80	156	120° Diffuse
TU HB IP20 G1 2 H 30 5K 70 120° Diffuse NL ST	2	171	5,000	28,032	70	164	120° Diffuse
TU HB IP20 G1 2 H 30 5K 80 120° Diffuse NL ST	2	171	5,000	26,911	80	157	120° Diffuse
TU HB IP20 G1 2 H 30 4K 70 30° Clear NL ST	2	171	4,000	28,572	70	167	30° Clear
TU HB IP20 G1 2 H 30 4K 80 30° Clear NL ST	2	171	4,000	28,572	80	167	30° Clear
TU HB IP20 G1 2 H 30 5K 70 30° Clear NL ST	2	171	5,000	30,076	70	176	30° Clear
TU HB IP20 G1 2 H 30 5K 80 30° Clear NL ST	2	171	5,000	28,873	80	169	30° Clear
TU HB IP20 G1 2 H 30 4K 70 60° Clear NL ST	2	171	4,000	28,312	70	166	60° Clear
TU HB IP20 G1 2 H 30 4K 80 60° Clear NL ST	2	171	4,000	28,017	80	164	60° Clear
TU HB IP20 G1 2 H 30 5K 70 60° Clear NL ST	2	171	5,000	29,492	70	172	60° Clear
TU HB IP20 G1 2 H 30 5K 80 60° Clear NL ST	2	171	5,000	28,312	80	166	60° Clear
TU HB IP20 G1 2 H 30 4K 70 90° Clear NL ST	2	171	4,000	28,032	70	164	90° Clear
TU HB IP20 G1 2 H 30 4K 80 90° Clear NL ST	2	171	4,000	28,032	80	164	90° Clear
TU HB IP20 G1 2 H 30 5K 70 90° Clear NL ST	2	171	5,000	29,200	70	171	90° Clear
TU HB IP20 G1 2 H 30 5K 80 90° Clear NL ST	2	171	5,000	28,032	80	164	90° Clear