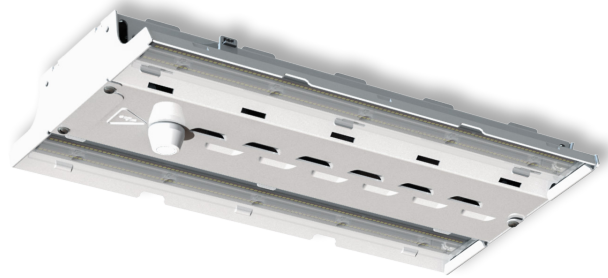


High Bay Luxon IoT Node



Product information

The high performing Tungstram High Bay industrial fixture range is equipped with a Nedap Luxon IoT Node to allow internet connection and 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 - 45 000 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

- Combination of steel and aluminium housing
- High Bay Series' design accommodates 1 or 2 modules with 2 LED units per module

Ratings - IP20

- Temperature Rated at -30°C to +50°C
- 1H10 L80B50 > 95 000 @Ta 50 °C
- 1H10 L80B50 > 116 000 @Ta 25 °C
- 1H15 L80B50 > 95 000 @Ta 50 °C
- 1H15 L80B50 > 116 000 @Ta 25 °C
- 1H20 L80B50 > 85 000 @Ta 50 °C
- 1H20 L80B50 > 106 000 @Ta 25 °C
- 1H25 L80B50 > 72 000 @Ta 50 °C
- 1H25 L80B50 > 90 000 @Ta 25 °C
- 2H30 L80B50 > 95 000 @Ta 50 °C
- 2H30 L80B50 > 116 000 @Ta 25 °C
- 2H45 L80B50 > 81 000 @Ta 40 °C
- 2H45 L80B50 > 93 000 @Ta 25 °C

Electrical

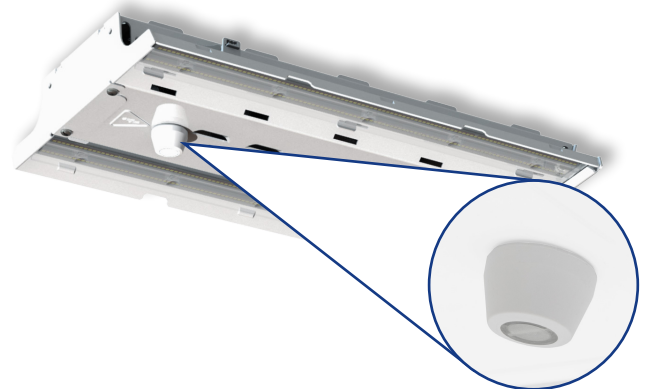
- 220-240V/50-60Hz
- System power factor is >90% and THD <20%

Finish

- Painted white finish, RAL 9016

Controls

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



Sensors

- Lux sensor integrated

Mounting

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

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, 80, 90, 100 and 120 degrees.
- A high performance product utilising top performing LED chips with three MacAdam steps, offering exceptional reliability.
- 4000K & 5000K versions
- 70 & 80 CRI options

Emergency Option

- Emergency mode is optional ('EA' in order logic/options 1).
- Emergency versions are assembled with Tridonic Converter Kit (EM converterLED PRO 200 V). Tridonic battery pack can provide EM lighting for 3 hours duration, type NiCd 5D CON, 28001181.
- Battery can provide EM lighting for 3 hours duration.
- Emergency Lighting LED Driver has self-test function as per IEC 62034.
- IK08 protection level for Fix output and DALI versions.
- IK02 for sensor types, IK03 for Emergency version.

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.

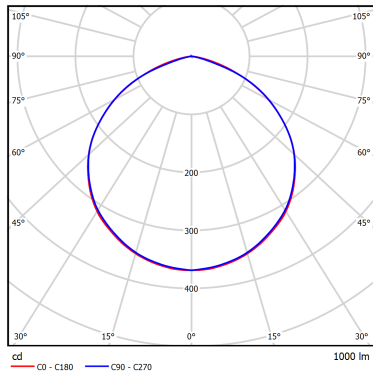
Luxon Fundamentals:

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.

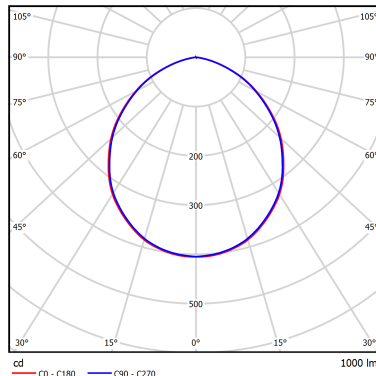
Order Logic

Product ID	Module / Efficiency / Lumen	CCT / CRI	Optic	Control	Options1																																																		
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 2H45 - 2M High 40klm	4K-4000K 70 CRI70 5K-5000K 70 CRI70 4K-4000K 80 CRI80 5K-5000K 80 CRI80	C1-120° Clear D1-100° Diffuse U1 - 80° diffuse L9-90° Clear L6-60° Clear L3-30° Clear	NL-Nedap Luxon	ST-Standard EA-EM auto-test																																																		
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 30%;"> <p>Module / Efficiency / Lumen</p> <table border="1"> <thead> <tr> <th>Module</th> <th>Power(W)</th> <th>Lumen</th> <th>lm/W</th> </tr> </thead> <tbody> <tr><td>1H10</td><td>57</td><td>9900</td><td>174</td></tr> <tr><td>1H15</td><td>82</td><td>15000</td><td>183</td></tr> <tr><td>1H20</td><td>117</td><td>19500</td><td>167</td></tr> <tr><td>1H25</td><td>150</td><td>25000</td><td>167</td></tr> <tr><td>2H30</td><td>171</td><td>29200</td><td>171</td></tr> <tr><td>2H45</td><td>273</td><td>45200</td><td>166</td></tr> </tbody> </table> </div> <div style="width: 30%;"> <p>5000K 70CRI Clear 120° Optics DALI Driver</p> <table border="1"> <thead> <tr> <th colspan="2">CCT/CRI multipliers</th> </tr> </thead> <tbody> <tr><td>5K70</td><td>100%</td></tr> <tr><td>5K80</td><td>96%</td></tr> <tr><td>4K70</td><td>96%</td></tr> <tr><td>4K80</td><td>95%</td></tr> </tbody> </table> </div> <div style="width: 30%;"> <p>Optical multipliers</p> <table border="1"> <tbody> <tr><td>C1</td><td>100%</td></tr> <tr><td>D1</td><td>90%</td></tr> <tr><td>U1</td><td>93,5%</td></tr> <tr><td>L9</td><td>100%</td></tr> <tr><td>L6</td><td>99,7%</td></tr> <tr><td>L3</td><td>105,3%</td></tr> </tbody> </table> </div> </div>						Module	Power(W)	Lumen	lm/W	1H10	57	9900	174	1H15	82	15000	183	1H20	117	19500	167	1H25	150	25000	167	2H30	171	29200	171	2H45	273	45200	166	CCT/CRI multipliers		5K70	100%	5K80	96%	4K70	96%	4K80	95%	C1	100%	D1	90%	U1	93,5%	L9	100%	L6	99,7%	L3	105,3%
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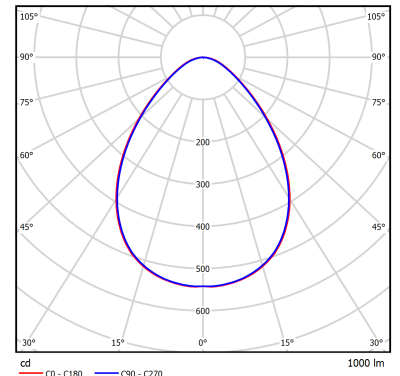
Photometric data - IP20



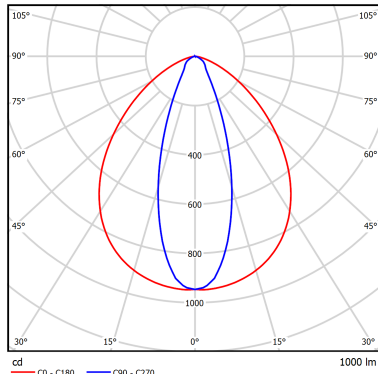
C1



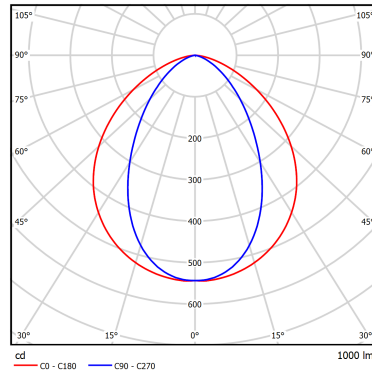
D1



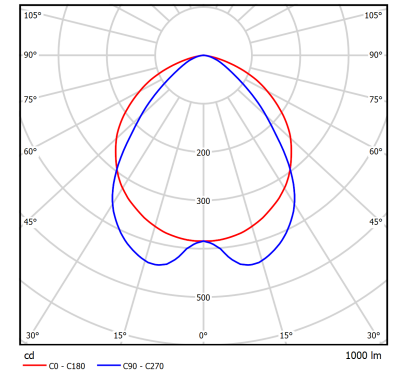
U1



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 (L3)	Any	High Bay Racked Aisles
80° UGR Plate Diffused Optic (U1)	Any	Open Floor Plan
100° Diffused Optic (D1)	Below 6 meter	Open Floor Plan

Photometric selection by application

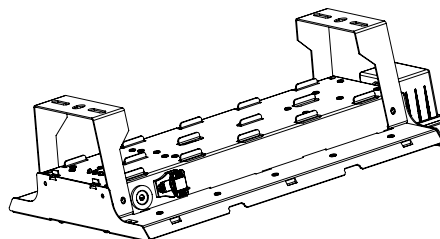
The new TU HB series optical system enables LEDs to provide precise illumination where needed. Optics are designed for commercial & industrial applications where mounting height, fixture spacing & light levels help determine optical selection. The above table outlines the photometric options and suggested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



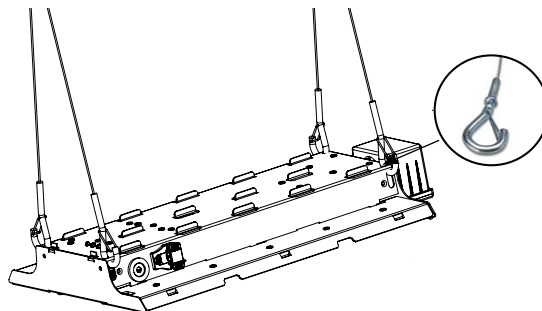
Accessories

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.



1.5m cable - **93091603**

YCABLEHOOK05FTPAIR - 5 FOOT PAIR 5 FT

3 m cable - **93091604**

YCABLEHOOK10FTPAIR - 10 FOOT PAIR

4.5 m cable - **93091605**

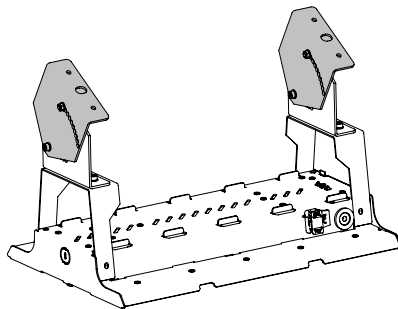
YCABLEHOOK15FTPAIR - 15 FOOT PAIR

6 m cable - **93091686**

YCABLEHOOK20FTPAIR - 20 FT PAIR 20FT

Tilted bracket kit

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

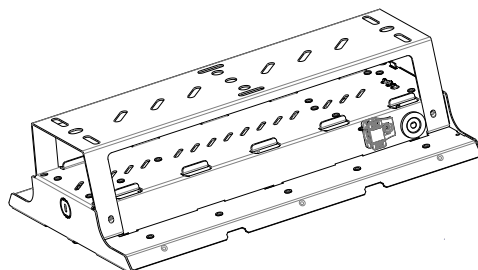


THB IP20 Tilted bracket kit
93104725*

* 2 pcs/kit

Busbar bracket kit (optional)

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



93116910

TU HB IP20 lighting busbar bracket kit - single pack 2 pcs / kit

93116861

TU HB lighting busbar bracket kit - 5 pack

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	4000	9,504	70	167	120° Clear
TU HB IP20 G1 1 H 10 4K 80 120° Clear NL ST	1	57	4000	9,405	80	165	120° Clear
TU HB IP20 G1 1 H 10 5K 70 120° Clear NL ST	1	57	5000	9,900	70	174	120° Clear
TU HB IP20 G1 1 H 10 5K 80 120° Clear NL ST	1	57	5000	9,504	80	167	120° Clear
TU HB IP20 G1 1 H 10 4K 70 100° Diffuse NL ST	1	57	4000	8,554	70	150	100° Diffuse
TU HB IP20 G1 1 H 10 4K 80 100° Diffuse NL ST	1	57	4000	8,465	80	149	100° Diffuse
TU HB IP20 G1 1 H 10 5K 70 100° Diffuse NL ST	1	57	5000	8,910	70	156	100° Diffuse
TU HB IP20 G1 1 H 10 5K 80 100° Diffuse NL ST	1	57	5000	8,554	80	150	100° Diffuse
TU HB IP20 G1 1 H 10 4K 70 30° Clear NL ST	1	57	4000	9,789	70	172	30° Clear
TU HB IP20 G1 1 H 10 4K 80 30° Clear NL ST	1	57	4000	9,687	80	170	30° Clear
TU HB IP20 G1 1 H 10 5K 70 30° Clear NL ST	1	57	5000	10,197	70	179	30° Clear
TU HB IP20 G1 1 H 10 5K 80 30° Clear NL ST	1	57	5000	9,789	80	172	30° Clear
TU HB IP20 G1 1 H 10 4K 70 60° Clear NL ST	1	57	4000	9,599	70	168	60° Clear
TU HB IP20 G1 1 H 10 4K 80 60° Clear NL ST	1	57	4000	9,499	80	167	60° Clear
TU HB IP20 G1 1 H 10 5K 70 60° Clear NL ST	1	57	5000	9,999	70	175	60° Clear
TU HB IP20 G1 1 H 10 5K 80 60° Clear NL ST	1	57	5000	9,599	80	168	60° Clear
TU HB IP20 G1 1 H 10 4K 70 90° Clear NL ST	1	57	4000	9,504	70	167	90° Clear
TU HB IP20 G1 1 H 10 4K 80 90° Clear NL ST	1	57	4000	9,405	80	165	90° Clear
TU HB IP20 G1 1 H 10 5K 70 90° Clear NL ST	1	57	5000	9,900	70	174	90° Clear

TU HB IP20 G1 1 H 10 5K 80 90° Clear NL ST	1	57	5000	9,504	80	167	90° Clear
TU HB IP20 G1 1 H 15 4K 70 120° Clear NL ST	1	82	4000	14,400	70	176	120° Clear
TU HB IP20 G1 1 H 15 4K 80 120° Clear NL ST	1	82	4000	14,250	80	174	120° Clear
TU HB IP20 G1 1 H 15 5K 70 120° Clear NL ST	1	82	5000	15,000	70	183	120° Clear
TU HB IP20 G1 1 H 15 5K 80 120° Clear NL ST	1	82	5000	14,400	80	176	120° Clear
TU HB IP20 G1 1 H 15 4K 70 100° Diffuse NL ST	1	82	4000	12,960	70	158	100° Diffuse
TU HB IP20 G1 1 H 15 4K 80 100° Diffuse NL ST	1	82	4000	12,825	80	156	100° Diffuse
TU HB IP20 G1 1 H 15 5K 70 100° Diffuse NL ST	1	82	5000	13,500	70	165	100° Diffuse
TU HB IP20 G1 1 H 15 5K 80 100° Diffuse NL ST	1	82	5000	12,960	80	158	100° Diffuse
TU HB IP20 G1 1 H 15 4K 70 30° Clear NL ST	1	82	4000	14,832	70	181	30° Clear
TU HB IP20 G1 1 H 15 4K 80 30° Clear NL ST	1	82	4000	14,678	80	179	30° Clear
TU HB IP20 G1 1 H 15 5K 70 30° Clear NL ST	1	82	5000	15,450	70	188	30° Clear
TU HB IP20 G1 1 H 15 5K 80 30° Clear NL ST	1	82	5000	14,832	80	181	30° Clear
TU HB IP20 G1 1 H 15 4K 70 60° Clear NL ST	1	82	4000	14,544	70	177	60° Clear
TU HB IP20 G1 1 H 15 4K 80 60° Clear NL ST	1	82	4000	14,393	80	176	60° Clear
TU HB IP20 G1 1 H 15 5K 70 60° Clear NL ST	1	82	5000	15,150	70	185	60° Clear
TU HB IP20 G1 1 H 15 5K 80 60° Clear NL ST	1	82	5000	14,544	80	177	60° Clear
TU HB IP20 G1 1 H 15 4K 70 90° Clear NL ST	1	82	4000	14,400	70	176	90° Clear
TU HB IP20 G1 1 H 15 4K 80 90° Clear NL ST	1	82	4000	14,250	80	174	90° Clear
TU HB IP20 G1 1 H 15 5K 70 90° Clear NL ST	1	82	5000	15,000	70	183	90° Clear
TU HB IP20 G1 1 H 15 5K 80 90° Clear NL ST	1	82	5000	14,400	80	176	90° Clear
TU HB IP20 G1 1 H 20 4K 70 120° Clear NL ST	1	117	4000	18,720	70	160	120° Clear
TU HB IP20 G1 1 H 20 4K 80 120° Clear NL ST	1	117	4000	18,525	80	158	120° Clear
TU HB IP20 G1 1 H 20 5K 70 120° Clear NL ST	1	117	5000	19,500	70	167	120° Clear
TU HB IP20 G1 1 H 20 5K 80 120° Clear NL ST	1	117	5000	18,720	80	160	120° Clear
TU HB IP20 G1 1 H 20 4K 70 100° Diffuse NL ST	1	117	4000	16,848	70	144	100° Diffuse
TU HB IP20 G1 1 H 20 4K 80 100° Diffuse NL ST	1	117	4000	16,673	80	143	100° Diffuse
TU HB IP20 G1 1 H 20 5K 70 100° Diffuse NL ST	1	117	5000	17,550	70	150	100° Diffuse
TU HB IP20 G1 1 H 20 5K 80 100° Diffuse NL ST	1	117	5000	16,848	80	144	100° Diffuse
TU HB IP20 G1 1 H 20 4K 70 30° Clear NL ST	1	117	4000	19,282	70	165	30° Clear
TU HB IP20 G1 1 H 20 4K 80 30° Clear NL ST	1	117	4000	19,081	80	163	30° Clear
TU HB IP20 G1 1 H 20 5K 70 30° Clear NL ST	1	117	5000	20,085	70	172	30° Clear
TU HB IP20 G1 1 H 20 5K 80 30° Clear NL ST	1	117	5000	19,282	80	165	30° Clear
TU HB IP20 G1 1 H 20 4K 70 60° Clear NL ST	1	117	4000	18,907	70	162	60° Clear
TU HB IP20 G1 1 H 20 4K 80 60° Clear NL ST	1	117	4000	18,710	80	160	60° Clear
TU HB IP20 G1 1 H 20 5K 70 60° Clear NL ST	1	117	5000	19,695	70	168	60° Clear
TU HB IP20 G1 1 H 20 5K 80 60° Clear NL ST	1	117	5000	18,907	80	162	60° Clear
TU HB IP20 G1 1 H 20 4K 70 90° Clear NL ST	1	117	4000	18,720	70	160	90° Clear
TU HB IP20 G1 1 H 20 4K 80 90° Clear NL ST	1	117	4000	18,525	80	158	90° Clear
TU HB IP20 G1 1 H 20 5K 70 90° Clear NL ST	1	117	5000	19,500	70	167	90° Clear
TU HB IP20 G1 1 H 20 5K 80 90° Clear NL ST	1	117	5000	18,720	80	160	90° Clear
TU HB IP20 G1 1 H 25 4K 70 120° Clear NL ST	1	150	4000	24,000	70	160	120° Clear
TU HB IP20 G1 1 H 25 4K 80 120° Clear NL ST	1	150	4000	23,750	80	158	120° Clear
TU HB IP20 G1 1 H 25 5K 70 120° Clear NL ST	1	150	5000	25,000	70	167	120° Clear
TU HB IP20 G1 1 H 25 5K 80 120° Clear NL ST	1	150	5000	24,000	80	160	120° Clear
TU HB IP20 G1 1 H 25 4K 70 100° Diffuse NL ST	1	150	4000	21,600	70	144	100° Diffuse
TU HB IP20 G1 1 H 25 4K 80 100° Diffuse NL ST	1	150	4000	21,375	80	143	100° Diffuse
TU HB IP20 G1 1 H 25 5K 70 100° Diffuse NL ST	1	150	5000	22,500	70	150	100° Diffuse
TU HB IP20 G1 1 H 25 5K 80 100° Diffuse NL ST	1	150	5000	21,600	80	144	100° Diffuse
TU HB IP20 G1 1 H 25 4K 70 30° Clear NL ST	1	150	4000	24,720	70	165	30° Clear
TU HB IP20 G1 1 H 25 4K 80 30° Clear NL ST	1	150	4000	24,463	80	163	30° Clear
TU HB IP20 G1 1 H 25 5K 70 30° Clear NL ST	1	150	5000	25,750	70	172	30° Clear
TU HB IP20 G1 1 H 25 5K 80 30° Clear NL ST	1	150	5000	24,720	80	165	30° Clear
TU HB IP20 G1 1 H 25 4K 70 60° Clear NL ST	1	150	4000	24,240	70	162	60° Clear
TU HB IP20 G1 1 H 25 4K 80 60° Clear NL ST	1	150	4000	23,988	80	160	60° Clear

TU HB IP20 G1 1 H 25 5K 70 60° Clear NL ST	1	150	5000	25,250	70	168	60° Clear
TU HB IP20 G1 1 H 25 5K 80 60° Clear NL ST	1	150	5000	24,240	80	162	60° Clear
TU HB IP20 G1 1 H 25 4K 70 90° Clear NL ST	1	150	4000	24,000	70	160	90° Clear
TU HB IP20 G1 1 H 25 4K 80 90° Clear NL ST	1	150	4000	23,750	80	158	90° Clear
TU HB IP20 G1 1 H 25 5K 70 90° Clear NL ST	1	150	5000	25,000	70	167	90° Clear
TU HB IP20 G1 1 H 25 5K 80 90° Clear NL ST	1	150	5000	24,000	80	160	90° Clear
TU HB IP20 G1 2 H 30 4K 70 120° Clear NL ST	2	171	4000	28,032	70	164	120° Clear
TU HB IP20 G1 2 H 30 4K 80 120° Clear NL ST	2	171	4000	27,740	80	162	120° Clear
TU HB IP20 G1 2 H 30 5K 70 120° Clear NL ST	2	171	5000	29,200	70	171	120° Clear
TU HB IP20 G1 2 H 30 5K 80 120° Clear NL ST	2	171	5000	28,032	80	164	120° Clear
TU HB IP20 G1 2 H 30 4K 70 100° Diffuse NL ST	2	171	4000	25,229	70	148	100° Diffuse
TU HB IP20 G1 2 H 30 4K 80 100° Diffuse NL ST	2	171	4000	24,966	80	146	100° Diffuse
TU HB IP20 G1 2 H 30 5K 70 100° Diffuse NL ST	2	171	5000	26,280	70	154	100° Diffuse
TU HB IP20 G1 2 H 30 5K 80 100° Diffuse NL ST	2	171	5000	25,229	80	148	100° Diffuse
TU HB IP20 G1 2 H 30 4K 70 30° Clear NL ST	2	171	4000	28,572	70	167	30° Clear
TU HB IP20 G1 2 H 30 4K 80 30° Clear NL ST	2	171	4000	28,572	80	167	30° Clear
TU HB IP20 G1 2 H 30 5K 70 30° Clear NL ST	2	171	5000	30,076	70	176	30° Clear
TU HB IP20 G1 2 H 30 5K 80 30° Clear NL ST	2	171	5000	28,873	80	169	30° Clear
TU HB IP20 G1 2 H 30 4K 70 60° Clear NL ST	2	171	4000	28,312	70	166	60° Clear
TU HB IP20 G1 2 H 30 4K 80 60° Clear NL ST	2	171	4000	28,017	80	164	60° Clear
TU HB IP20 G1 2 H 30 5K 70 60° Clear NL ST	2	171	5000	29,492	70	172	60° Clear
TU HB IP20 G1 2 H 30 5K 80 60° Clear NL ST	2	171	5000	28,312	80	166	60° Clear
TU HB IP20 G1 2 H 30 4K 70 90° Clear NL ST	2	171	4000	28,032	70	164	90° Clear
TU HB IP20 G1 2 H 30 4K 80 90° Clear NL ST	2	171	4000	28,032	80	164	90° Clear
TU HB IP20 G1 2 H 30 5K 70 90° Clear NL ST	2	171	5000	29,200	70	171	90° Clear
TU HB IP20 G1 2 H 30 5K 80 90° Clear NL ST	2	171	5000	28,032	80	164	90° Clear
TU HB IP20 G1 1 H 25 5K 80 60° Clear NL EA	1	153	5000	24,240	80	158	60° Clear