

In
Light
We
Trust



HUMAN CENTRIC LIGHTING

HUMAN CENTRIC LIGHTING



XX 21

esse-ci
LIVING LIGHT

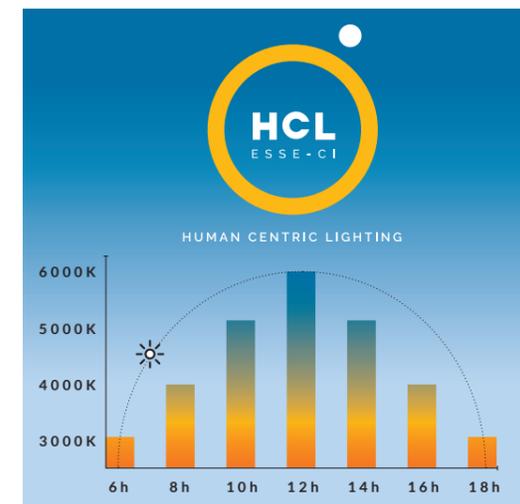


HCL HUMAN CENTRIC LIGHTING

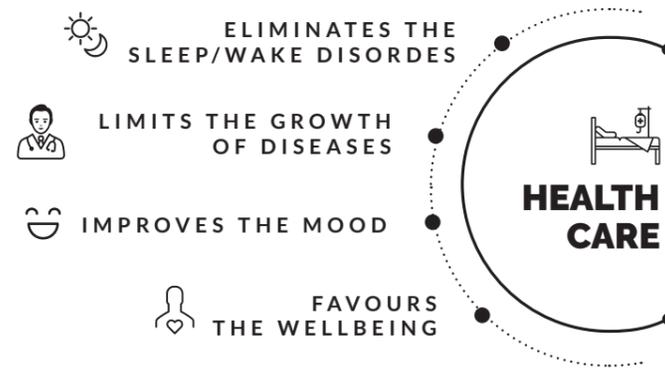
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LIGHT AS A SOURCE OF WELLNESS



By modifying the quantity and colour of the light, by adapting the artificial lighting to the seasons and to the hour of the day, **the natural rhythms are reproduced** in every internal space and **numerous benefits** are obtained for the human organism. The combination of lighting solutions and systems that combine these visual, biological and emotional effects of light are called Human Centric Lighting (HCL). Scientific studies show that a light produced with the HCL system, favoring the proper functioning of the circadian rhythm, is able to regularize the biorhythms, improve the mood, limit the onset of certain diseases, encourage concentration and increase people's productivity.



HUMAN CIRCADIAN RHITHM

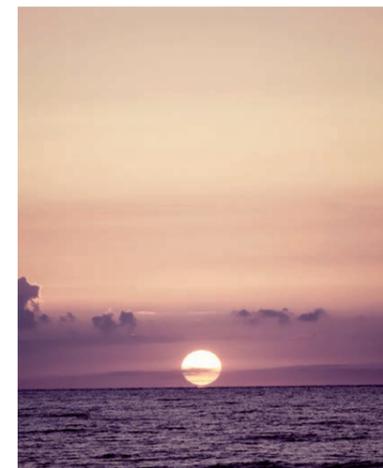
Natural light plays a fundamental role in the regulation of the natural day-night rhythm and in the **correct stimulation of the "biological clock"**.

The change of the light colour temperature between cool white and warm white aims to stimulate the activities that take place over during the day.

"According to our natural biorhythm, we humans do not maintain the same level of performance and motivation throughout the day".

Today the dynamic lighting solutions are able to offer valid instruments to replicate and simulate indoor light with conditions of intensity, wave length and duration, similar to the natural light. The light cycle dedicated to melatonin activation is designed to **improve concentration** and **prevent tiredness** by introducing a cold colour temperature at the right time, and to **promote relaxing** increasing performance / productivity through a warmer colour temperatures.

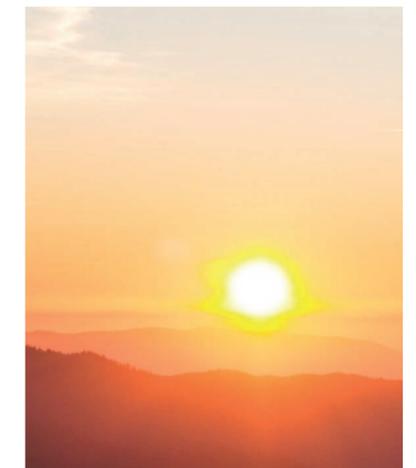
DAWN 4000K



MIDDAY 5000K



DUSK 2700K





TECHNOLOGY

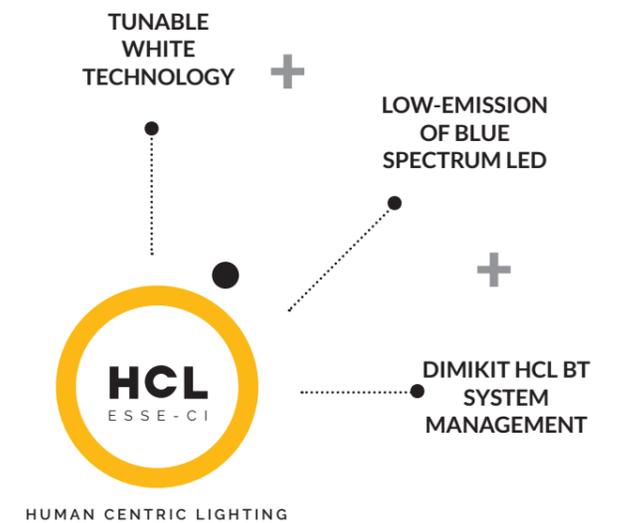
The HCL system uses LED color temperature management technologies adjustable along the Planckian curve from 2.700K to 6.500K, then from hot light to cold light, in automatic and programmable way.

Given the major advantages, this technology can

be applied to contexts ranging from the **educational** (schools, institutes), to **commercial** (shops, offices), **industrial, health** (hospitals and nursing homes), **residential** or, in particular geographical **locations or environments without natural light**.

ESSE-CI HCL SYSTEM

ESSE-CI has developed an HCL system that uses extremely compact and effective technologies: **Tunable White technology** combined with the **LED system low-emission blue spectrum** all managed by the practical **DIMKIT HCL BT**, the intelligent sensor for automatic regulation of color temperature and amount of light that is managed via APP.





TUNABLE WHITE TECHNOLOGY AT THE SERVICE OF HCL

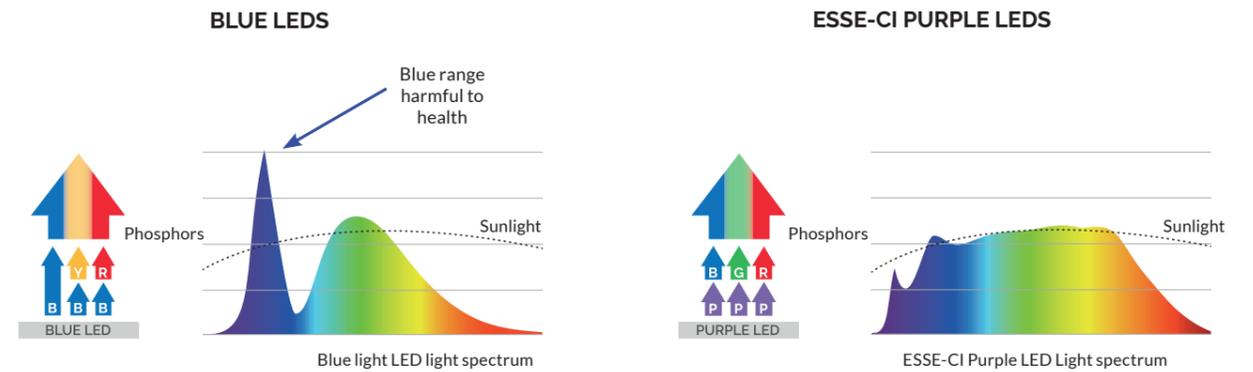
Tunable white is the LED technology that allows the **management of color temperatures from 2.700K to 6.500K** (from a warm light to a cold one). Thanks to the latest technologies the emission of the **flux remains constant** throughout the color temperature range.

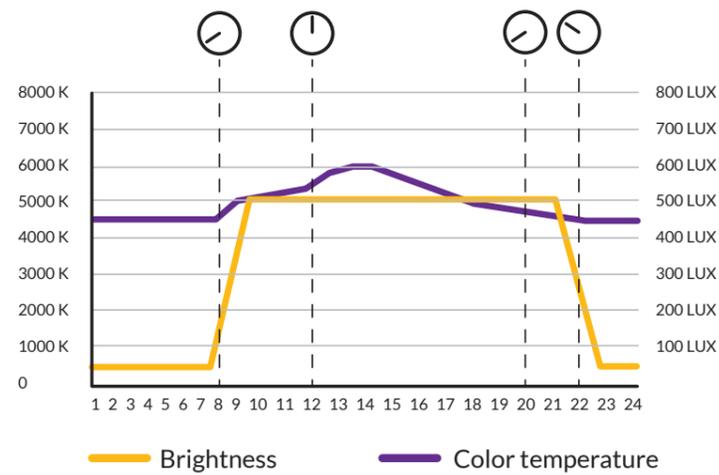
LOW BLUE SPECTRUM LED

ESSE-CI integrates into the HCL system a new led technology that manages to reproduce the spectrum of natural sunlight thanks to the use of purple light LEDs and a sophisticated combination of phosphors that minimizes the amount of light in the blue range, potentially harmful to eyes and health. This allows you to have a **light source with the same characteristics as natural light.**

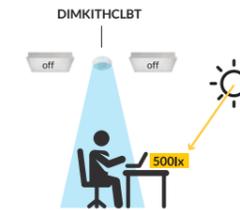
DIMKIT-HCL-BT

DIMIKITHCLBT is an intelligent sensor that performs **functions of PIR Detection, Daylight and automatic color temperature control.** With the free App you set latitude, date and time and you recall one of the preset profiles (color temperature and brightness variation) depending on the context of use or you customize your own.





EXAMPLE OF OPERATING - OFFICE



8:00 AM

CONDITION

- Presence in the office
- **lighting target 500lx**
- **The natural light is sufficient** to reach the target

ACTION

- Sensor **does not switch on the fittings**



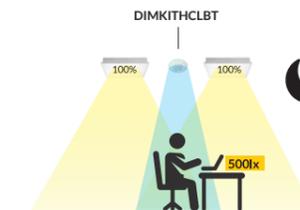
12:00 AM

CONDITION

- Presence in the office
- **lighting target 500lx**
- Selected **office profile mode provides 6000K**
- The natural **light illumination is not sufficient** to fully reach the target

ACTION

- The sensor **partially dims** the fittings until the target is reached and manages the color according to the HCL profile



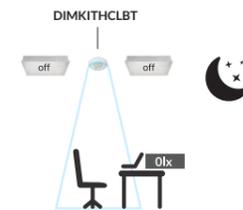
8:00 PM

CONDITION

- Presence in the office
- **lighting target 500lx**
- Selected **office profile mode provides 4500K**
- The **natural light illumination is insufficient**

ACTION

- The sensor switches on all fittings to reach the target and manages the color according to the HCL profile



10:00 PM

CONDITION

- No presence in the office

ACTION

- The sensor will turn off the light based on the **waiting time for the set off** (1, 10, 30 min)

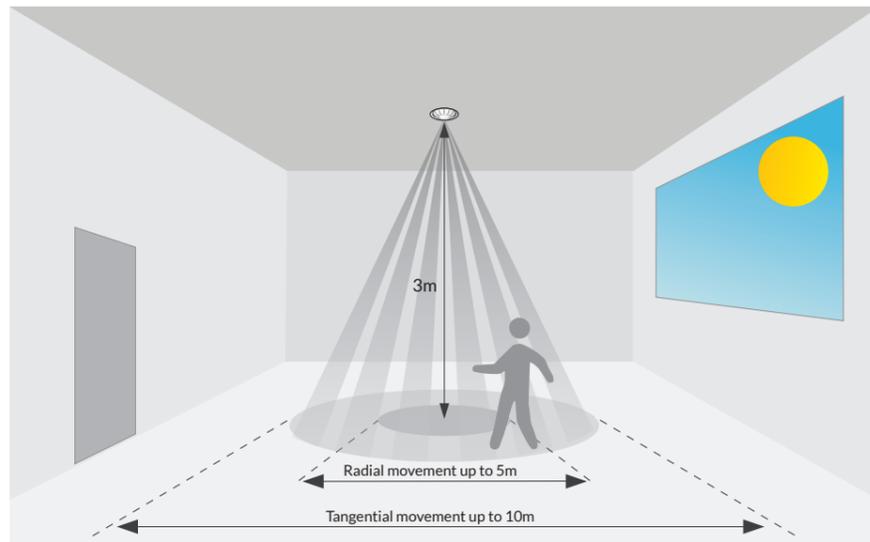
DIMKIT-HCL-BT Bluetooth® CASAMBI

DIMKITHCLBT is a **smart sensor** whose functions include **Pir Detection, Daylight** and the **automatic control of the colour temperature.**

The free app can be used to set the latitude, date and time and to launch one of the nine preset profiles (colour temperature and brightness variation) depending on the location; the user can also customise their own profile. The master sensor controls 40 DALI devices and the slave sensors (code SENSCLBTS). Manual Bluetooth wall controls (code HCLBTTD) can also be integrated.



COD
DIMKITHCLBT



Detection area of the sensor



CONTROL VIA APP

With the **free app for iOS and Android**, you can configure and manage the network of HCL devices, environment by environment, customizing the different settings: scenes, circadian rhythm, daylight compensation, synchronization of switches, etc.



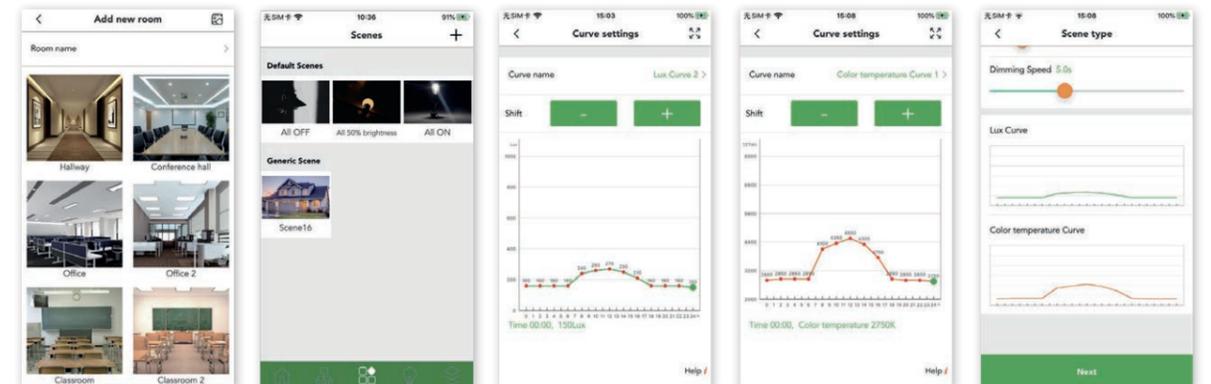
Accessories



HCLBTTD
Touch Panel for wall installation.



SENSHCLBTS
Slave sensor to increase PIR coverage.



HCL PRODUCTS



ABSENT HCL



ARKEON HCL



BEN HCL



BRIGHT HCL



GROOVE HCL



Bluetooth



DIMKIT-HCL-BT



GROOVE DISPLAY HCL



HALL LED PRO HCL



LINT EVO HCL



OVVIO DISPLAY LED HCL



SEMPLICE LED HCL

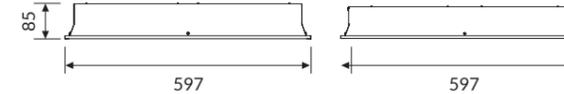
ABSENT HCL



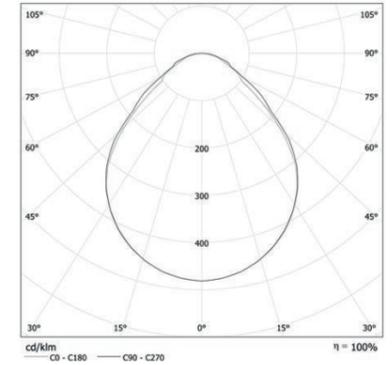
2700K-6500K tunable white version with constant flux for HCL ESSE-CI technologies.
DALI DT8 Driver.

OPTIC

- DPL: Diffuser in Diamond Prism LED Technology with UGR<19 for ambient with display screen equipment
- PG: Diffuser for diffused emission with UGR<22



IP 40 A'



VERSIONS

DPL

COD	Light Bulb Icon	lm
41DPL38HCL	38W	3840

PG

COD	Light Bulb Icon	lm
41PG38HCL	38W	3994

ARKEON HCL

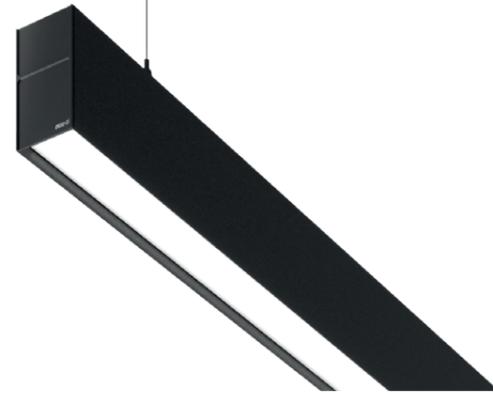
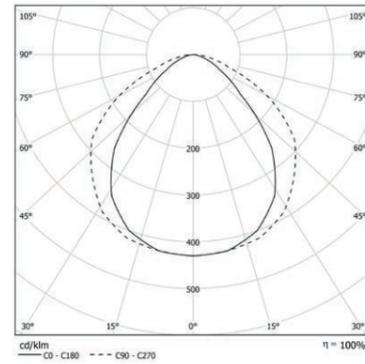
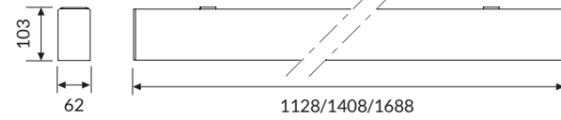


2700K-6500K tunable white version with constant flux for HCL ESSE-CI technologies.
DALI DT8 Driver.

OPTIC

Direct emission with CLD technology diffuser (collimated diffuser UGR<16).

IP 40 A++



VERSIONS

CLD

COD	💡	lm	mm
46DR48CLDHCL	48W	5040	1128
46DR60CLDHCL	60W	6300	1408
46DR72CLDHCL	72W	7420	1688

BEN HCL

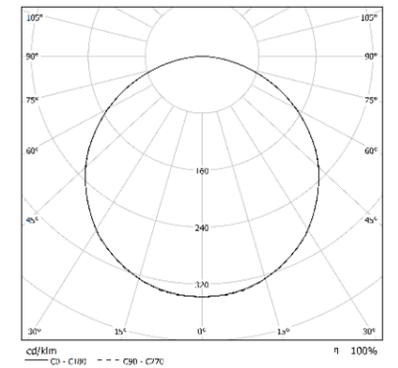
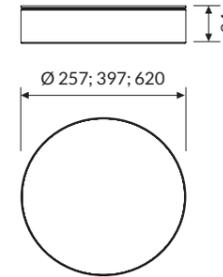


2700K-6500K tunable white version with constant flux for HCL ESSE-CI technologies.
DALI DT8 Driver.

OPTIC

PG diffuser, frosted Acryl-Satiné and impact resistant with perimeter silk-screen printing, UGR<22.

IP 40 A+



PG VERSIONS

COD	💡	lm	Ø (mm)
10PG24HCL	24W	2208	257
10PG32HCL	32W	2944	397
10PG80HCL	80W	7360	620

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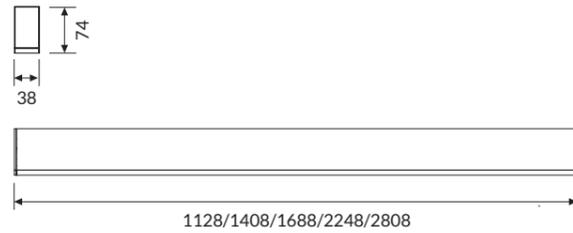
BRIGHT HCL



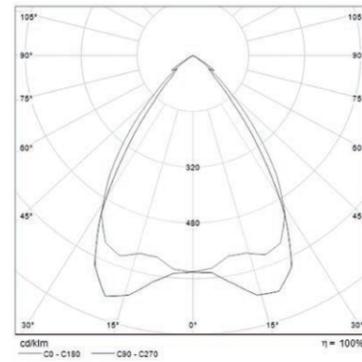
2700K-6500K tunable white version with constant flux for HCL ESSE-CI technologies.
DALI DT8 Driver.

OPTIC

- DPL technology diffuser to control glare UGR < 19
- PG diffuser for soft diffusion with UGR < 22



IP 40 A++



VERSIONS

DPL

COD	💡	lm	mm
80DPL48HCL	48W	3480	1128
80DPL60HCL	60W	4350	1408
80DPL72HCL	72W	5220	1688
80DPL96HCL	96W	6960	2248
80DPL120HCL	120W	8700	2808

PG

COD	💡	lm	mm
80PG48HCL	48W	4260	1128
80PG60HCL	60W	5325	1408
80PG72HCL	72W	6390	1688
80PG96HCL	96W	8520	2248
80PG120HCL	120W	10650	2808

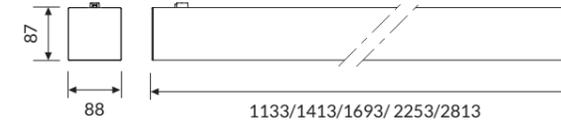
GROOVE HCL



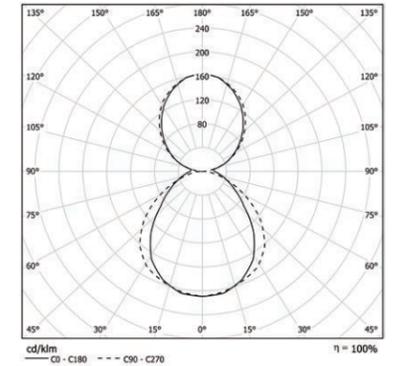
2700K-6500K tunable white version with constant flux for HCL ESSE-CI technologies.
DALI DT8 Driver.

OPTIC

Direct emission with DPL technology diffuser (UGR < 19).



IP 40 A++



VERSIONS

DPL

COD	💡	lm	mm
43DR48DPLHCL	48W	3840	1133
43DR60DPLHCL	60W	4800	1413
43DR72DPLHCL	72W	5760	1693
43DR96DPLHCL	96W	7680	2253
43DR120DPLHCL	120W	9600	2813

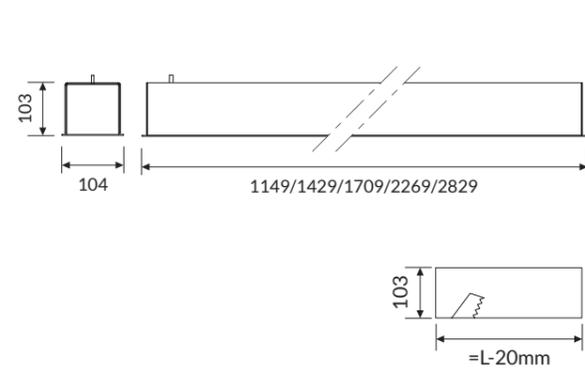
GROOVE DISPLAY HCL



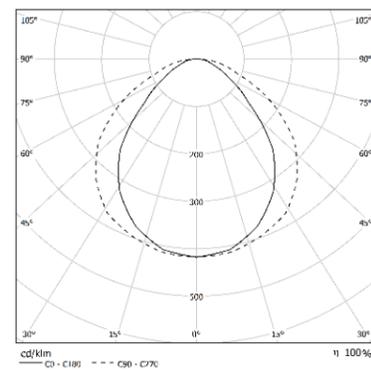
2700K-6500K tunable white version with constant flux for HCL ESSE-CI technologies.
DALI DT8 Driver.

OPTIC

DPL technology diffuser (UGR<19) for environments with display screen equipment.



IP 40 A++



VERSIONS

DPL

COD	💡	lm	mm
43DPL48HCLF	48W	3840	1149
43DPL60HCLF	60W	4800	1429
43DPL72HCLF	72W	5760	1709
43DPL96HCLF	96W	7680	2269
43DPL120HCLF	120W	9600	2829

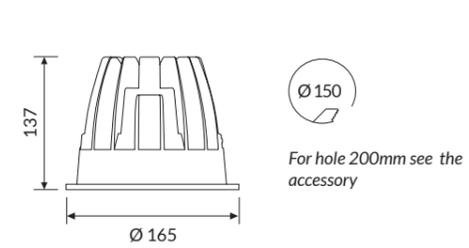
HALL LED PRO HCL



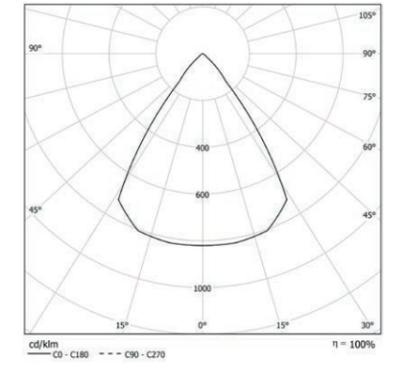
2700K-6500K tunable white version with constant flux for HCL ESSE-CI technologies.
DALI DT8 Driver.

OPTIC

Internal aluminum reflectors with transparent glass:
10° - 20° - 40° - 70° beam angles.
CUT OFF > 30°.



IP 44 A+



VERSIONS

Medium

COD	💡	lm
38VT22HCL10	22W 10°	1719
38VT22HCL20	22W 20°	1719
38VT22HCL40	22W 40°	1719
38VT22HCL70	22W 70°	1719

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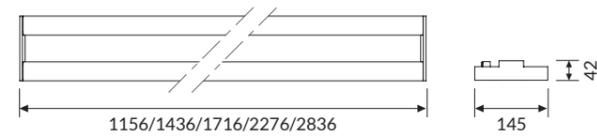
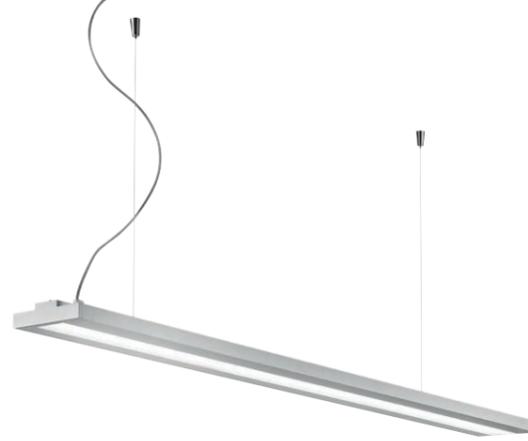
LINT EVO HCL



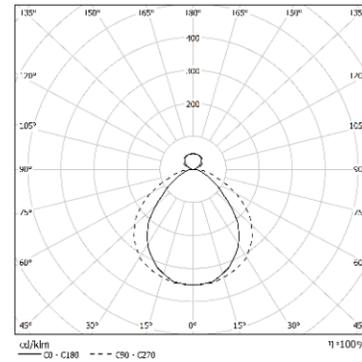
2700K-6500K tunable white version with constant flux for HCL ESSE-CI technologies.
DALI DT8 Driver.

OPTIC

- DPL (Diamond Prism LED) technology with UGR<19
- PG diffuser for even diffused emission with UGR<22



IP 40 A++



VERSIONS

DPL

COD	💡	lm	mm
79DI48DPLHCL	48W	3720	1156
79DI60DPLHCL	60W	4650	1436
79DI72DPLHCL	72W	5580	1716
79DI96DPLHCL	96W	7440	2276
79DI120DPLHCL	120W	9300	2836

PG

COD	💡	lm	mm
79DI48PGHCL	48W	3900	1156
79DI60PGHCL	60W	4875	1436
79DI72PGHCL	72W	5850	1716
79DI96PGHCL	96W	7800	2276
79DI120PGHCL	120W	9750	2836

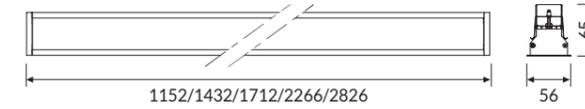
OVVIO DISPLAY HCL



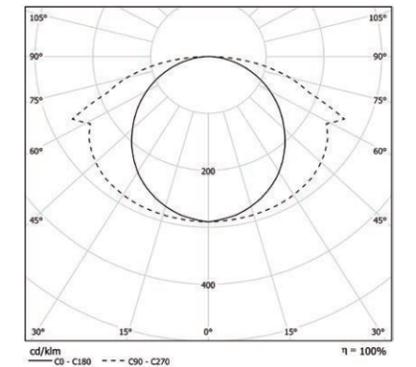
2700K-6500K tunable white version with constant flux for HCL ESSE-CI technologies.
DALI DT8 Driver.

OPTIC

PMMA diffuser for a soft emission with no shadow evident.



IP 40 A++



VERSIONS

PG

COD	💡	lm	mm
40PG48HCL	48W	3780	1152
40PG60HCL	60W	4725	1432
40PG72HCL	72W	5670	1712
40PG96HCL	96W	7560	2266
40PG120HCL	120W	9450	2826

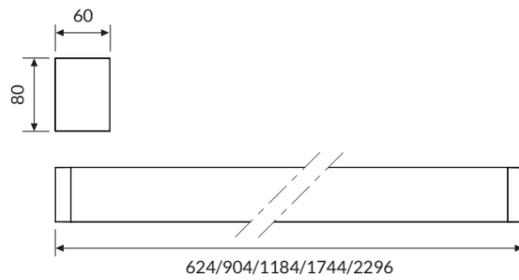
SEMPLICE LED HCL



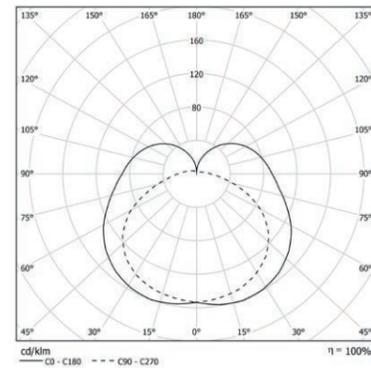
2700K-6500K tunable white version with constant flux for HCL ESSE-CI technologies.
DALI DT8 Driver.

OPTIC

PMMA technopolymer (UGR<22) with surface treatment for completely uniform light distribution. Integrated LED technology.



IP 40 A++



VERSIONS

PG

COD	💡	lm	mm
67PG24HCL	24W	1740	624
67PG36HCL	36W	2610	904
67PG48HCL	48W	3480	1184
67PG72HCL	72W	4350	1744
67PG96HCL	96W	6960	2296



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LIVING LIGHT

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