

CoreLine Waterproof

WT120C LED40S/840 PSU L1200



WT120C - LED Module, system flux 4000 lm - Power supply unit

Whether for a new building or renovation of an existing space, customers want lighting solutions that provide quality of light and substantial energy and maintenance savings. The new CoreLine Waterproof range of LED products can be used to replace traditional waterproof luminaires with fluorescent lamps. The process of selecting, installing and maintaining is so easy – it's a simple switch.

Product data

• General information

| | |
|-------------------------------|---|
| Product family code | WT120C [WT120C] |
| Number of light sources | 1 [1 pc] |
| Lamp family code | LED40S [LED Module, system flux 4000 lm] |
| Lamp colour code | 840 [840 white] |
| Light source replaceable | No [No] |
| Driver/power unit/transformer | PSU [Power supply unit] |
| Driver included | Yes [Yes] |
| Optical cover/lens type | PC [Polycarbonate] |
| Dimmable | No [No] |
| Connection | PIP [Push-in connector and pull relief] |
| Protection class IEC | CLI [Safety class I] |
| Ingress protection code | IP65 [Dust penetration-protected, jet-proof] |
| Mech. impact protection code | IK08 [5 J vandal-protected] |
| Length | L1200 [1200 mm] |
| Colour | GR [Grey] |
| Glow-wire test | 850/30 [Temperature 850 °C, duration 30 s] |
| Flammability mark | F [For mounting on normally flammable surfaces] |
| CE mark | CE [CE mark] |

• Electrical

| | |
|-----------------|--------------------------|
| Input voltage | 220-240 V [220 to 240 V] |
| Input frequency | 50-60 Hz [50 to 60 Hz] |

• Mechanical

| | |
|------------------|--------------------|
| Housing material | PC [Polycarbonate] |
|------------------|--------------------|

| | |
|-----------------------------|--------------------|
| Optic material | PC [Polycarbonate] |
| Optical cover/lens material | PC [Polycarbonate] |

• Initial perform. (IEC compliant)

| | |
|--------------------------------|------------------------|
| Initial input power | 41 W [41 W] |
| Initial luminous flux | 4000 Lm |
| Initial LED luminaire efficacy | 98 Lm/W |
| Lamp colour temperature | 4000 [4000 K] |
| Colour Rendering Index | >80 [>80] |
| Initial chromaticity | (0.38, 0.38) SDCM <3.5 |

• Over time perform. (IEC compliant)

| | |
|-------------------------------|----------|
| Median useful life L90B50 | 25000 hr |
| Median useful life L80B50 | 50000 hr |
| Driver failure rate at 5000 h | 1 % |

• Application conditions

| | |
|-------------------------------|--|
| Average ambient temperature | T25 [+25 °C] |
| Ambient temperature range | -20 to +35°C [-20 to +35 °C] |
| Maximum dim level | - [Not applicable] |
| Suitable for random switching | Yes [Yes (relates to presence/movement detection and daylight harvesting)] |



PHILIPS

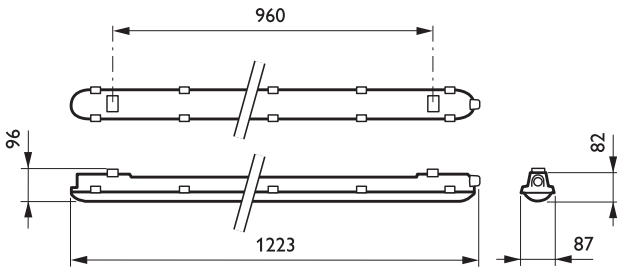
Product Data

Order code 840480 00
 Full product code 871829184048000
 Full product name WT120C LED40S/840 PSU L1200
 Order product name WT120C LED40S/840 PSU L1200
 Pieces per pack 0
 Packs per outerbox 1
 Bar code on 8718291840480
 outerbox - EAN3

Logistic code(s) - 910500453338
 12NC
 Net weight per piece 1.530 kg



Dimensional drawing



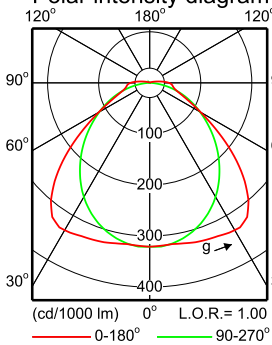
WT120C LED40S/840 PSU L1200

Photometric data

WT120C 1xLED40S/840 L1200

1 x 4000 lm

Polar intensity diagram

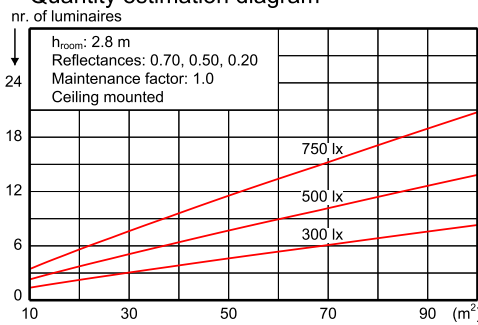


(cd/1000 lm) 0° L.O.R.= 1.00
 — 0-180° — 90-270°

Light output ratio 1.00
 Service upward 0.03
 Service downward 0.97
 CIE flux code 48 81 95 97 100
 S/H ratio crosswise max. 1.8
 lengthwise max. 1.7
 UGRcen (4Hx8H, 0.25H) 24
 UTE71-121: 0.97D + 0.03T

LWV1837800

Quantity estimation diagram

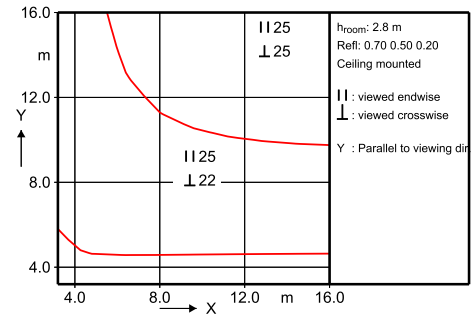


Utilisation factor table

| Room Index k | Reflectances for ceiling, walls and working plane (CIE) | | | | | | | | | | | |
|--------------|---|------|------|------|------|------|------|------|------|------|------|------|
| | 0.80 | 0.80 | 0.70 | 0.70 | 0.70 | 0.70 | 0.50 | 0.50 | 0.30 | 0.30 | 0.00 | 0.00 |
| 0.60 | 0.48 | 0.46 | 0.47 | 0.46 | 0.45 | 0.38 | 0.37 | 0.32 | 0.36 | 0.32 | 0.30 | 0.00 |
| 0.80 | 0.59 | 0.55 | 0.58 | 0.56 | 0.55 | 0.47 | 0.46 | 0.41 | 0.45 | 0.41 | 0.38 | 0.00 |
| 1.00 | 0.68 | 0.63 | 0.66 | 0.64 | 0.62 | 0.55 | 0.54 | 0.49 | 0.53 | 0.48 | 0.46 | 0.00 |
| 1.25 | 0.77 | 0.70 | 0.75 | 0.72 | 0.69 | 0.62 | 0.61 | 0.56 | 0.60 | 0.56 | 0.53 | 0.00 |
| 1.50 | 0.83 | 0.75 | 0.81 | 0.77 | 0.74 | 0.68 | 0.67 | 0.62 | 0.65 | 0.61 | 0.58 | 0.00 |
| 2.00 | 0.93 | 0.83 | 0.90 | 0.86 | 0.82 | 0.76 | 0.75 | 0.71 | 0.73 | 0.70 | 0.67 | 0.00 |
| 2.50 | 0.99 | 0.88 | 0.96 | 0.91 | 0.86 | 0.82 | 0.80 | 0.76 | 0.78 | 0.75 | 0.72 | 0.00 |
| 3.00 | 1.04 | 0.91 | 1.01 | 0.95 | 0.90 | 0.85 | 0.83 | 0.80 | 0.82 | 0.79 | 0.76 | 0.00 |
| 4.00 | 1.10 | 0.95 | 1.06 | 0.99 | 0.93 | 0.90 | 0.88 | 0.85 | 0.86 | 0.84 | 0.80 | 0.00 |
| 5.00 | 1.13 | 0.97 | 1.09 | 1.02 | 0.96 | 0.93 | 0.91 | 0.88 | 0.88 | 0.86 | 0.83 | 0.00 |

Ceiling mounted

UGR diagram



Luminance Table

| Plane Cone | 0.0 | 45.0 | 90.0 |
|------------|-------|-------|-------|
| 45.0 | 11513 | 13116 | 10739 |
| 50.0 | 9784 | 12288 | 10185 |
| 55.0 | 7873 | 10564 | 9613 |
| 60.0 | 6193 | 8374 | 9070 |
| 65.0 | 4980 | 6256 | 8554 |
| 70.0 | 4212 | 4655 | 8003 |
| 75.0 | 3885 | 3710 | 7259 |
| 80.0 | 4025 | 3239 | 6056 |
| 85.0 | 4533 | 3205 | 4114 |
| 90.0 | 4982 | 3601 | 4740 |

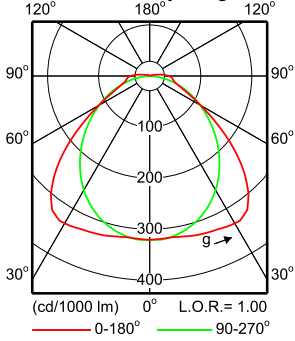
(cd/m²)

2014-08-01

WT120C 1xLED40S/840 EL1 L1200 EM

1 x 340 lm

Polar intensity diagram



Light output ratio 1.00
 Service upward 0.03
 Service downward 0.97

CIE flux code 48 81 95 97 100

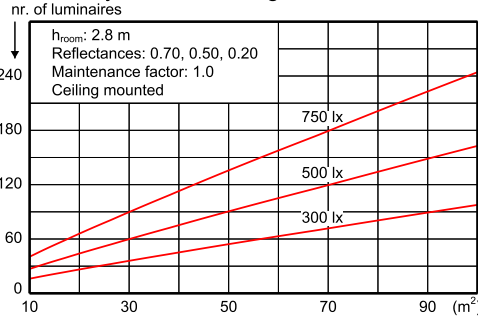
S/H ratio crosswise max. 1.8
 lengthwise max. 1.7

UGR_{cen} (4Hx8H, 0.25H) 18
 EN12464-1 65 deg, 3000 cd/m²

UTE71-121: 0.97D + 0.03T

LVW1837800

Quantity estimation diagram

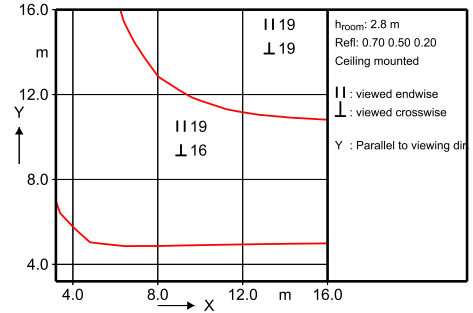


Utilisation factor table

| Room Index k | Reflectances for ceiling, walls and working plane (CIE) | | | | | | | | | | | |
|--------------|---|------|------|------|------|------|------|------|------|------|------|------|
| | 0.80 | 0.80 | 0.70 | 0.70 | 0.70 | 0.70 | 0.50 | 0.50 | 0.30 | 0.30 | 0.00 | 0.00 |
| 0.60 | 0.48 | 0.46 | 0.47 | 0.46 | 0.45 | 0.38 | 0.37 | 0.32 | 0.36 | 0.32 | 0.30 | 0.30 |
| 0.80 | 0.59 | 0.55 | 0.58 | 0.56 | 0.55 | 0.47 | 0.46 | 0.41 | 0.45 | 0.41 | 0.38 | 0.38 |
| 1.00 | 0.68 | 0.63 | 0.66 | 0.64 | 0.62 | 0.55 | 0.54 | 0.49 | 0.53 | 0.48 | 0.46 | 0.46 |
| 1.25 | 0.77 | 0.70 | 0.75 | 0.72 | 0.69 | 0.62 | 0.61 | 0.56 | 0.60 | 0.56 | 0.53 | 0.53 |
| 1.50 | 0.83 | 0.75 | 0.81 | 0.77 | 0.74 | 0.68 | 0.67 | 0.62 | 0.65 | 0.61 | 0.58 | 0.58 |
| 2.00 | 0.93 | 0.83 | 0.90 | 0.86 | 0.82 | 0.76 | 0.75 | 0.71 | 0.73 | 0.70 | 0.67 | 0.67 |
| 2.50 | 0.99 | 0.88 | 0.96 | 0.91 | 0.86 | 0.82 | 0.80 | 0.76 | 0.78 | 0.75 | 0.72 | 0.72 |
| 3.00 | 1.04 | 0.91 | 1.01 | 0.95 | 0.90 | 0.85 | 0.83 | 0.80 | 0.82 | 0.79 | 0.76 | 0.76 |
| 4.00 | 1.10 | 0.95 | 1.06 | 0.99 | 0.93 | 0.90 | 0.88 | 0.85 | 0.86 | 0.84 | 0.80 | 0.80 |
| 5.00 | 1.13 | 0.97 | 1.09 | 1.02 | 0.96 | 0.93 | 0.91 | 0.88 | 0.88 | 0.86 | 0.83 | 0.83 |

Ceiling mounted

UGR diagram



Luminance Table

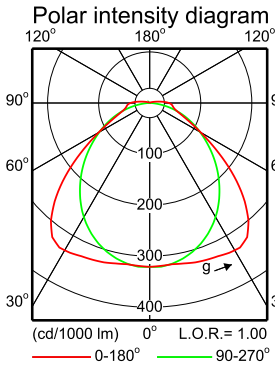
| Plane Cone | 0.0 | 45.0 | 90.0 |
|------------|------|------|------|
| 45.0 | 1973 | 2222 | 1804 |
| 50.0 | 1677 | 2078 | 1704 |
| 55.0 | 1350 | 1783 | 1601 |
| 60.0 | 1062 | 1410 | 1502 |
| 65.0 | 854 | 1050 | 1406 |
| 70.0 | 722 | 779 | 1301 |
| 75.0 | 666 | 618 | 1160 |
| 80.0 | 690 | 536 | 938 |
| 85.0 | 777 | 525 | 590 |
| 90.0 | 854 | 581 | 403 |

(cd/m²)

2014-08-01

WT120C 1xLED40S/840 EL3 L1200 EM

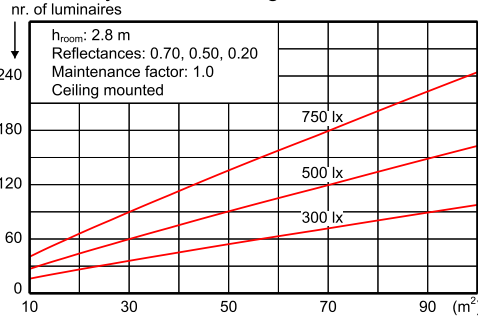
1 x 340 lm



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LVW1837800

Quantity estimation diagram

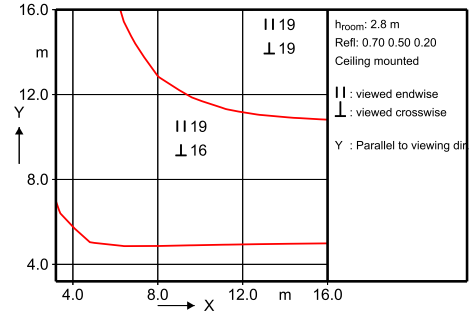


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|--------------|---|------|------|------|------|------|------|------|------|------|------|------|
| | 0.80 | 0.80 | 0.70 | 0.70 | 0.70 | 0.70 | 0.50 | 0.50 | 0.30 | 0.30 | 0.00 | 0.00 |
| 0.60 | 0.48 | 0.46 | 0.47 | 0.46 | 0.45 | 0.38 | 0.37 | 0.32 | 0.36 | 0.32 | 0.30 | 0.30 |
| 0.80 | 0.59 | 0.55 | 0.58 | 0.56 | 0.55 | 0.47 | 0.46 | 0.41 | 0.45 | 0.41 | 0.38 | 0.38 |
| 1.00 | 0.68 | 0.63 | 0.66 | 0.64 | 0.62 | 0.55 | 0.54 | 0.49 | 0.53 | 0.48 | 0.46 | 0.46 |
| 1.25 | 0.77 | 0.70 | 0.75 | 0.72 | 0.69 | 0.62 | 0.61 | 0.56 | 0.60 | 0.56 | 0.53 | 0.53 |
| 1.50 | 0.83 | 0.75 | 0.81 | 0.77 | 0.74 | 0.68 | 0.67 | 0.62 | 0.65 | 0.61 | 0.58 | 0.58 |
| 2.00 | 0.93 | 0.83 | 0.90 | 0.86 | 0.82 | 0.76 | 0.75 | 0.71 | 0.73 | 0.70 | 0.67 | 0.67 |
| 2.50 | 0.99 | 0.88 | 0.96 | 0.91 | 0.86 | 0.82 | 0.80 | 0.76 | 0.78 | 0.75 | 0.72 | 0.72 |
| 3.00 | 1.04 | 0.91 | 1.01 | 0.95 | 0.90 | 0.85 | 0.83 | 0.80 | 0.82 | 0.79 | 0.76 | 0.76 |
| 4.00 | 1.10 | 0.95 | 1.06 | 0.99 | 0.93 | 0.90 | 0.88 | 0.85 | 0.86 | 0.84 | 0.80 | 0.80 |
| 5.00 | 1.13 | 0.97 | 1.09 | 1.02 | 0.96 | 0.93 | 0.91 | 0.88 | 0.88 | 0.86 | 0.83 | 0.83 |

Ceiling mounted

UGR diagram



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(cd/m²)

2014-08-01

WT120C 1xLED40S/840 EL3 L1200 EM



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2014, August 7
 data subject to change