

Fridge lighting demo

SHELLY-N 6X1 and SHELLY-WAS 6X1 (TOP)

SHELLY-N lenses were attached to the fridge ceiling just in front of the shelves while SHELLY-WAS lenses were attached on the ceiling 100-150 mm from the back wall. A 5 mm high plastic strip was also attached to front of each lens to prevent dazzling. Nichia LEDs were used. SHELLY-N - NCSx119A LED and SHELLY-WAS - NF2x757A. Both these LEDs are a good solution and are the same colour temperature. The new version from Nichia NVSx119B will also work well.

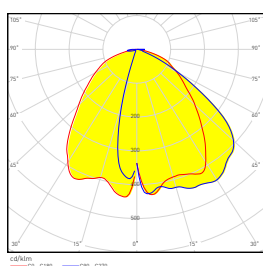
Max forward current with Nichia119A (High power) 700mA and with 757 (Mid power) 150mA.



Optics used

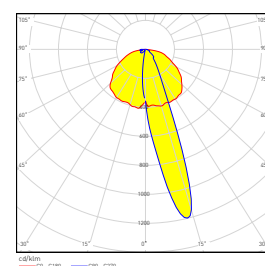
C14275_SHELLY-T-6X1-N

- Developed especially to illuminate near field shelf objects
- Dimensions: 120 x 20 mm
- Height: 7 mm
- Precision-molded from optical grade PMMA – UL94 HB rated material with operating rating -40°C to +80°C



C14274_SHELLY-T-6X1-WAS

- Designed to light the back wall of the shelf
- Dimensions: 120 x 20 mm
- Height: 7.6 mm
- Precision-molded from optical grade PMMA – UL94 HB rated material with operating rating -40°C to +80°C



SHELLY-N 2X1 (ONE SIDE)

One SHELLY-N was cut into three 2X1 pieces, a good solution allowing more possibilities to find balanced lighting in every area of the fridge.

The three 2X1 pieces of SHELLY-N were attached to the hinge side and a small plastic strip was added to prevent dazzling. Optics were installed 140 to 160 mm apart.

Suggested LEDs: Nichia 119A / B or Nichia 757.



SHELLY-N 2X1 (BOTH SIDES)

In principal the same installation as above implemented on both sides of the fridge. There are three 2X1 pieces of SHELLY-N with anti-dazzle strips on each side giving a completely uniform and even illumination of the whole interior.

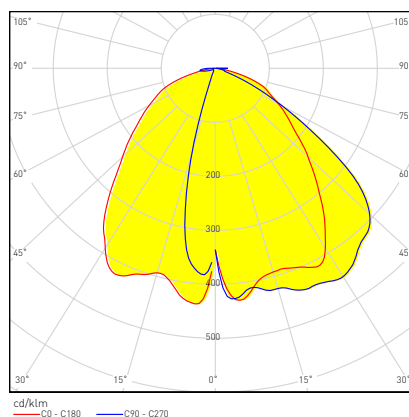
Suggested LEDs: Nichia 119A / B or Nichia 757.



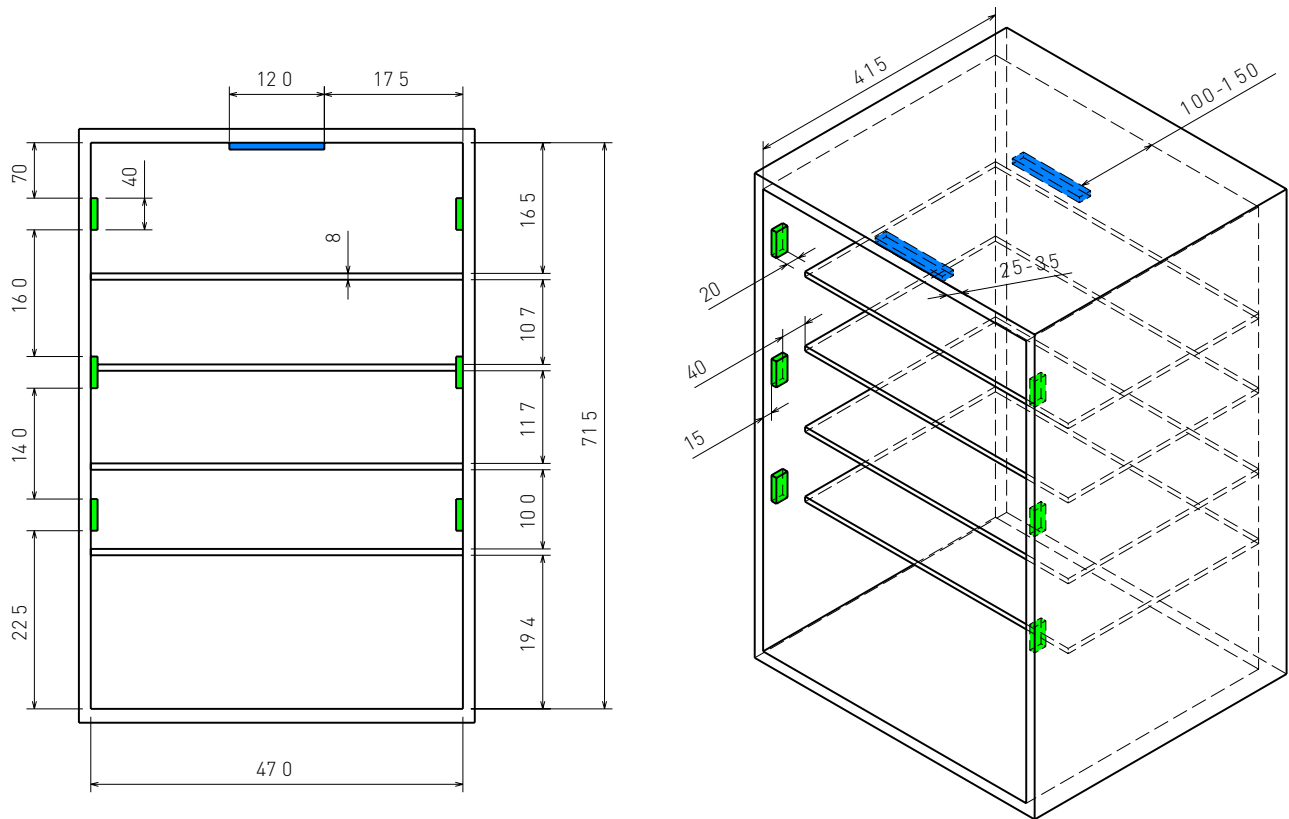
Optics used

C14275_SHELLY-T-6X1-N

- Dimensions: 120 x 20 mm
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Fridge lighting demo assembly



Blue = LED assembly 1: SHELLY-N 6x1 in front, SHELLY-WAS 6x1 in back

Green = LED assembly 2: SHELLY-N 2x1

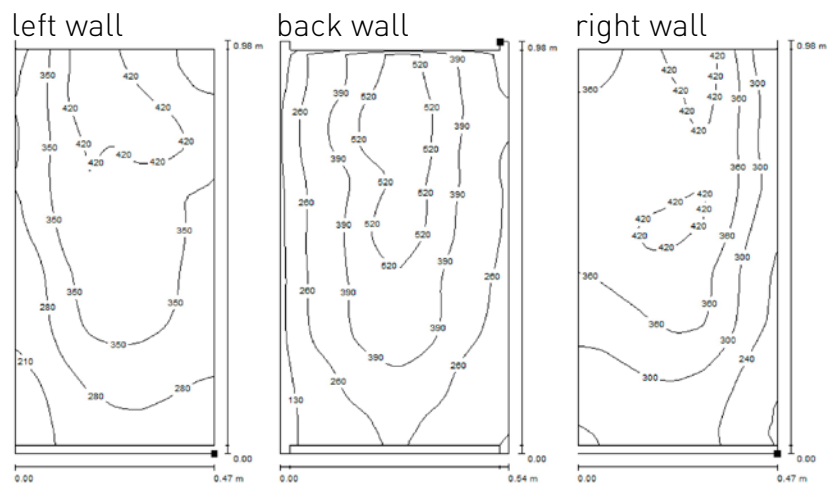
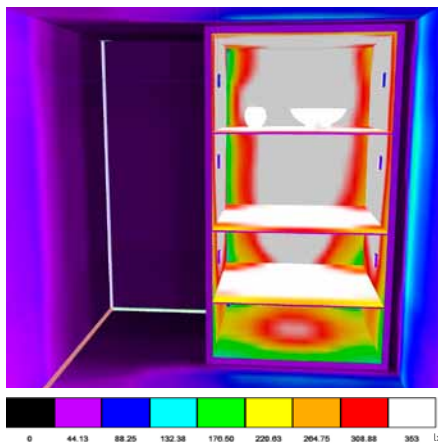
A 5mm high anti-dazzling strip with the same width as the lens piece should be installed in front of the lens to prevent stray light coming into viewers direction.

Application simulation

6 pieces SHELLY-N 2X1

Luminous flux (luminaire): 86 lm

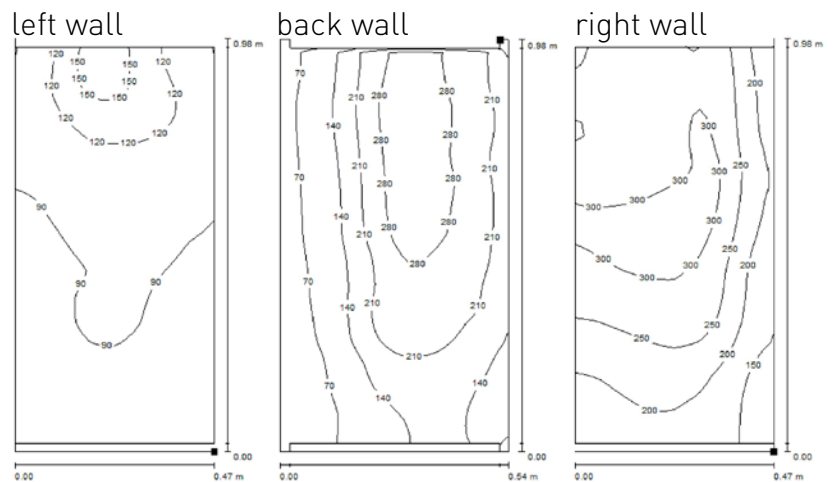
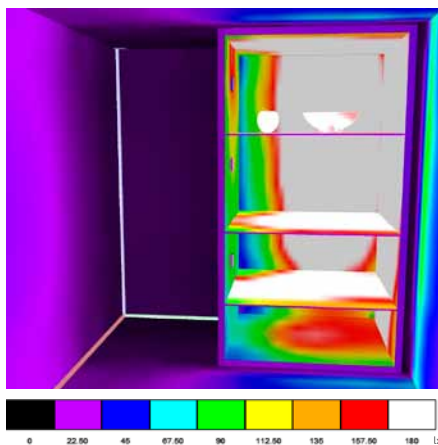
Luminaire wattage: 0.8 W



3 pieces SHELLY-N 2X1

Luminous flux (luminaire): 86 lm

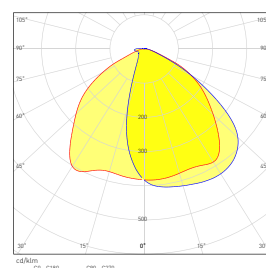
Luminaire wattage: 0.8 W



Optics used

C14275_SHELLY-T-6X1-N

- Dimensions: 120 x 20 mm
- Height: 7 mm
- Efficiency: 94%
- Precision-molded from optical grade PMMA – UL94 HB rated material with operating rating -40°C to +80°C

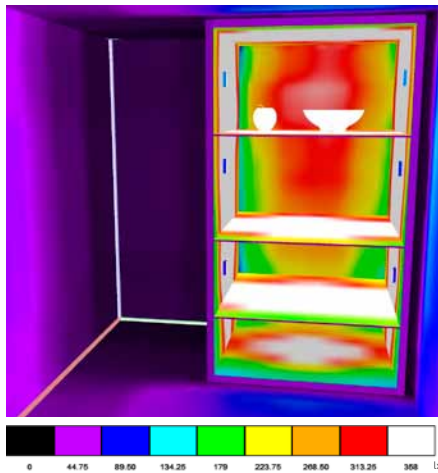


LEDiL

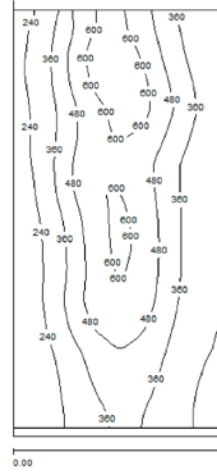
6 pieces SHELLY-WAS 2X1

Luminous flux (luminaire): 87 lm

Luminaire wattage: 0.8 W



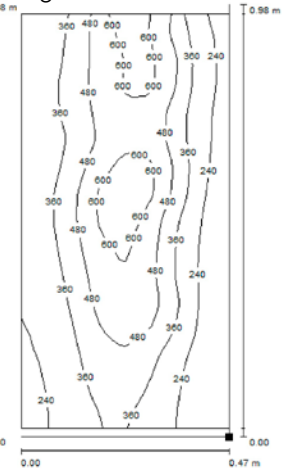
left wall



back wall

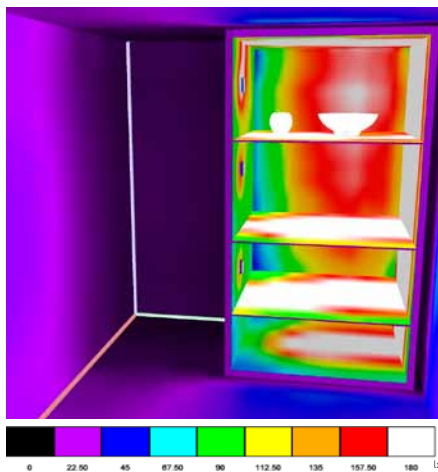


right wall

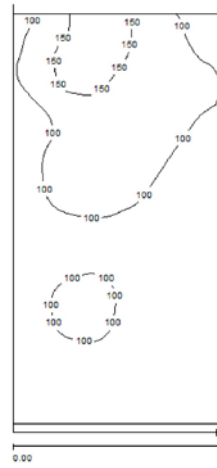
**3 pieces SHELLY-WAS 2X1**

Luminous flux (luminaire): 87 lm

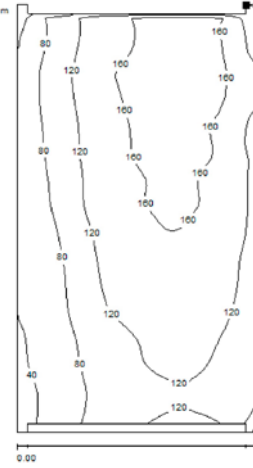
Luminaire wattage: 0.8 W



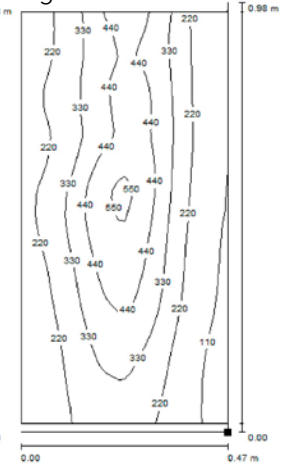
left wall



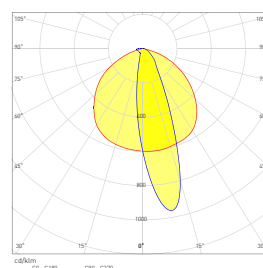
back wall



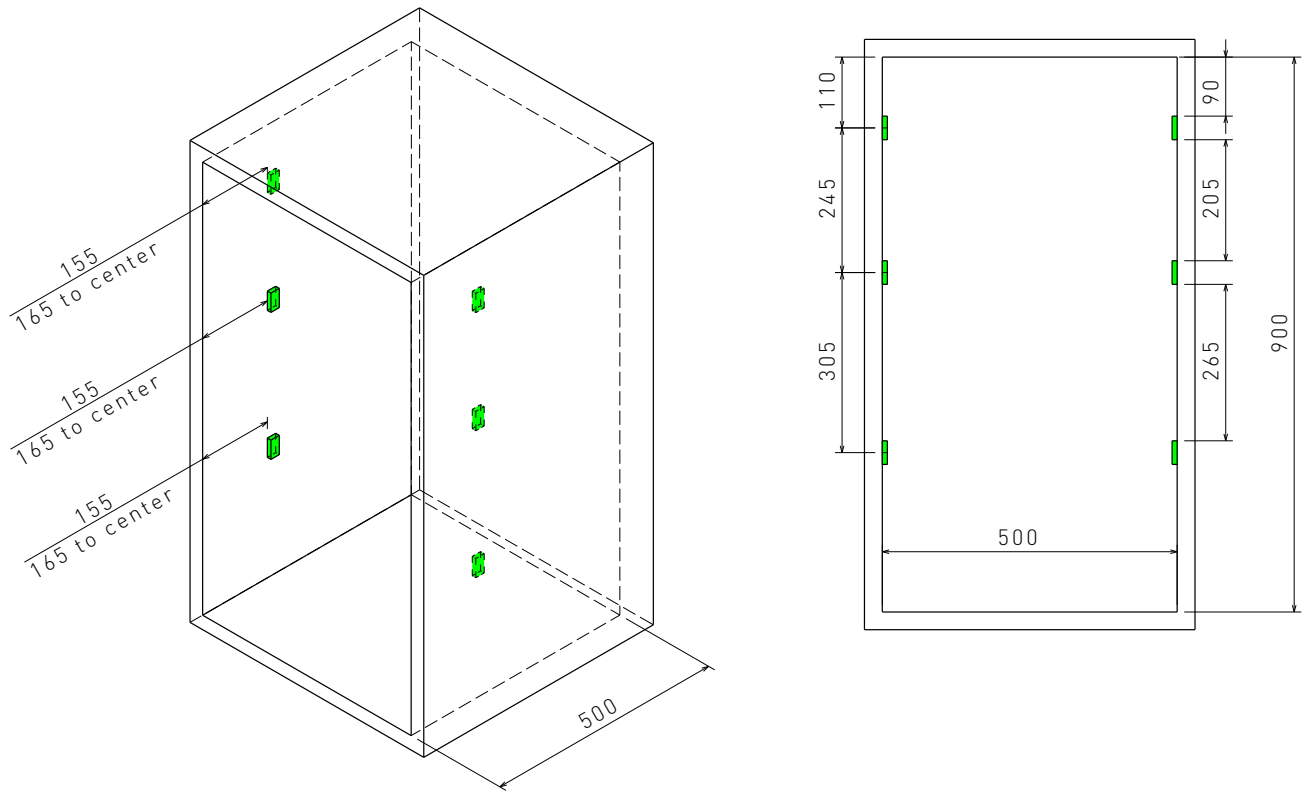
right wall

**Optics used****C14274_SHELLY-T-6X1-WAS**

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- Efficiency: 94%
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Assembly used in simulation



Green = LED assembly: SHELLY-N 2x1 in 6 places