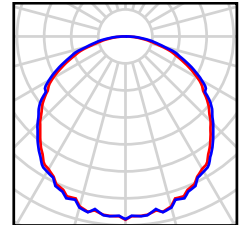


Operator  
Telephone  
Fax  
e-Mail

## Project 1 / Luminaire parts list

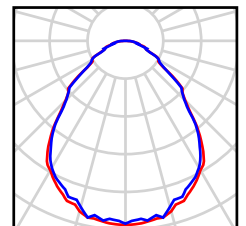
54 Pieces 2R Ltd LED panel Capri 45W Q 600/600  
Article No.:  
Luminous flux (Luminaire): 3996 lm  
Luminous flux (Lamps): 4000 lm  
Luminaire Wattage: 45.0 W  
Luminaire classification according to CIE: 100  
CIE flux code: 46 77 95 100 100  
Fitting: 1 x LED45W (Correction Factor 1.000).

See our luminaire  
catalog for an image of  
the luminaire.



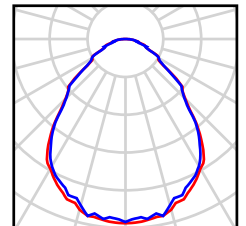
12 Pieces 2R Ltd LED Downlight CAPRI R/S 12W LED  
Article No.: LED Downlight  
Luminous flux (Luminaire): 959 lm  
Luminous flux (Lamps): 960 lm  
Luminaire Wattage: 12.0 W  
Luminaire classification according to CIE: 100  
CIE flux code: 62 87 97 100 100  
Fitting: 1 x LED12W (Correction Factor 1.000).

See our luminaire  
catalog for an image of  
the luminaire.



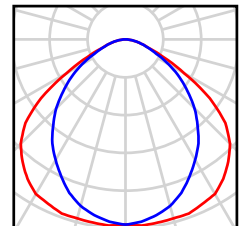
12 Pieces 2R Ltd LED Downlight CAPRI R/S 24W LED  
Article No.: LED Downlight  
Luminous flux (Luminaire): 1898 lm  
Luminous flux (Lamps): 1900 lm  
Luminaire Wattage: 24.0 W  
Luminaire classification according to CIE: 100  
CIE flux code: 62 87 97 100 100  
Fitting: 1 x LED24W (Correction Factor 1.000).

See our luminaire  
catalog for an image of  
the luminaire.



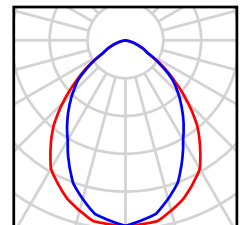
4 Pieces 2R Ltd Neolux E 4x18W VG Fluorescent  
Luminaires Recessed Mounted  
Article No.: Neolux E 4x18W VG  
Luminous flux (Luminaire): 3331 lm  
Luminous flux (Lamps): 5400 lm  
Luminaire Wattage: 72.0 W  
Luminaire classification according to CIE: 100  
CIE flux code: 53 87 98 100 62  
Fitting: 4 x TL 18W/840 (Correction Factor 1.000).

See our luminaire  
catalog for an image of  
the luminaire.



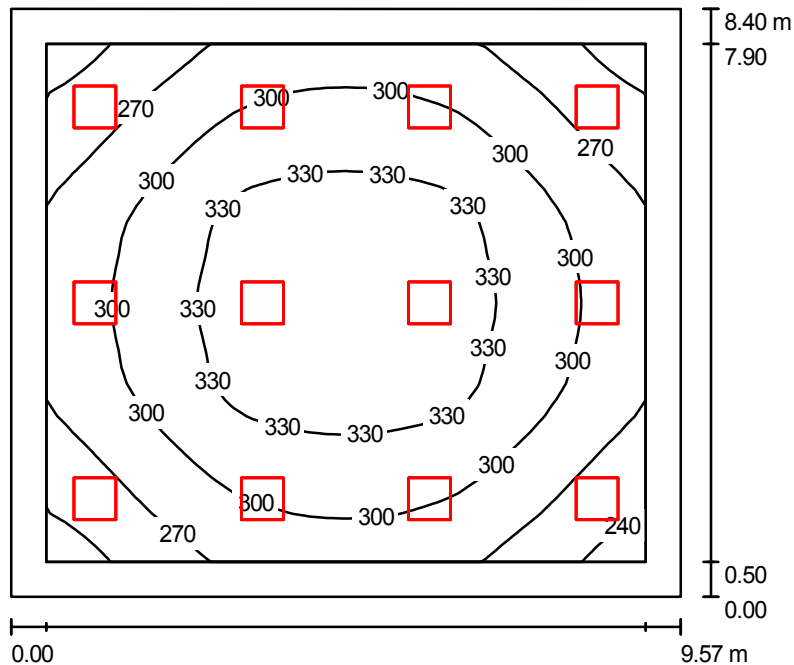
6 Pieces 2R Nordstar 602 150W E MH Recessed  
Downlight  
Article No.: Nordstar 602 150W E  
Luminous flux (Luminaire): 8400 lm  
Luminous flux (Lamps): 12000 lm  
Luminaire Wattage: 150.0 W  
Luminaire classification according to CIE: 100  
CIE flux code: 66 94 100 98 71  
Fitting: 1 x MHN 150W (Correction Factor 1.000).

See our luminaire  
catalog for an image of  
the luminaire.



Operator  
Telephone  
Fax  
e-Mail

## Зала за фитнес / Summary



Height of Room: 4.720 m, Mounting Height: 4.720 m, Maintenance factor: 0.80

Values in Lux, Scale 1:108

| Surface   | $\rho$ [%] | $E_{av}$ [lx] | $E_{min}$ [lx] | $E_{max}$ [lx] | $u0$  |
|-----------|------------|---------------|----------------|----------------|-------|
| Workplane | /          | 301           | 225            | 351            | 0.749 |
| Floor     | 20         | 287           | 192            | 354            | 0.671 |
| Ceiling   | 70         | 88            | 81             | 114            | 0.920 |
| Walls (4) | 50         | 209           | 92             | 360            | /     |

**Workplane:**

Height: 0.000 m  
Grid: 32 x 32 Points  
Boundary Zone: 0.500 m

**UGR**

Left Wall  
Lower Wall  
(CIE, SHR = 1.00.)

**Lengthways-**

19  
17

**Across**

19  
18

**to luminaire axis**

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.695, Ceiling / Working Plane: 0.291.

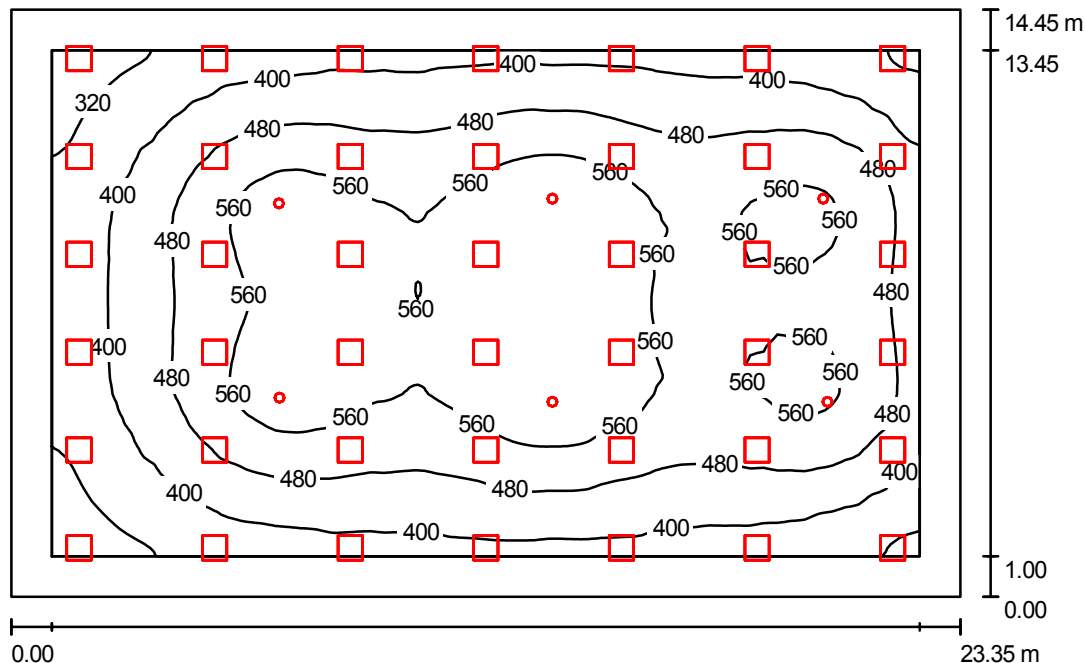
**Luminaire Parts List**

| No.    | Pieces | Designation (Correction Factor)                 | $\Phi$ (Luminaire) [lm] | $\Phi$ (Lamps) [lm] | P [W] |
|--------|--------|---|-------------------------|---------------------|-------|
| 1      | 12     | 2R Ltd LED panel Capri 45W Q 600/600<br>(1.000) | 3996                    | 4000                | 45.0  |
| Total: |        |   | 47950                   | 48000               | 540.0 |

Specific connected load:  $6.72 \text{ W/m}^2 = 2.23 \text{ W/m}^2/100 \text{ lx}$  (Ground area:  $80.39 \text{ m}^2$ )

Operator  
Telephone  
Fax  
e-Mail

## Многофункционална спортна зала-състезание-Клас II / Summary



Height of Room: 4.720 m, Mounting Height: 4.720 m, Maintenance factor: 0.80

Values in Lux, Scale 1:186

| Surface   | $\rho$ [%] | $E_{av}$ [lx] | $E_{min}$ [lx] | $E_{max}$ [lx] | $u_0$ |
|-----------|------------|---------------|----------------|----------------|-------|
| Workplane | /          | 486           | 267            | 621            | 0.549 |
| Floor     | 20         | 449           | 212            | 619            | 0.471 |
| Ceiling   | 70         | 103           | 87             | 131            | 0.852 |
| Walls (4) | 50         | 238           | 101            | 355            | /     |

### Workplane:

Height: 0.000 m  
Grid: 128 x 128 Points  
Boundary Zone: 1.000 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.488, Ceiling / Working Plane: 0.211.

### Luminaire Parts List

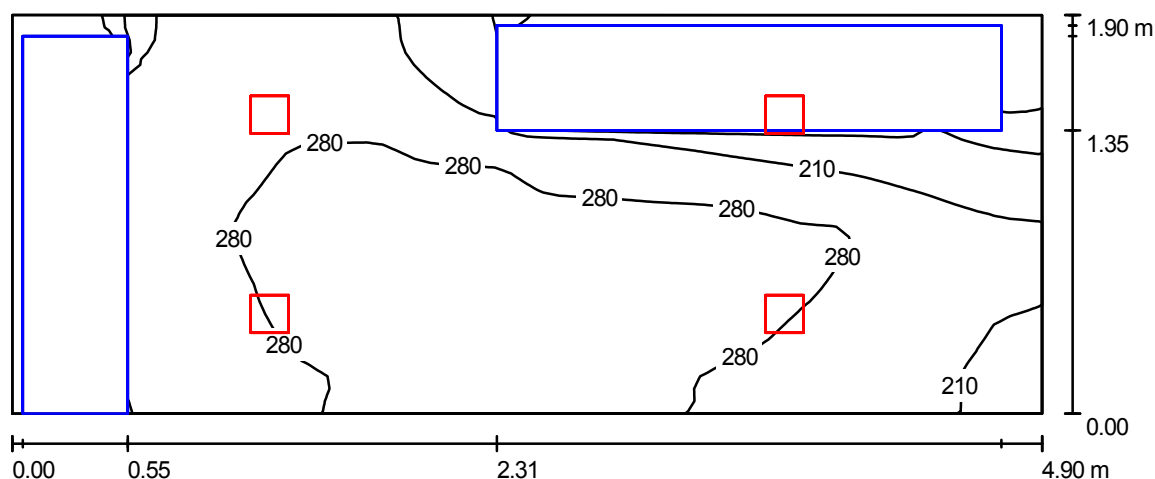
| No. | Pieces | Designation (Correction Factor)                      | $\Phi$ (Luminaire) [lm] | $\Phi$ (Lamps) [lm] | P [W] |
|-----|--------|--|-------------------------|---------------------|-------|
| 1   | 42     | 2R Ltd LED panel Capri 45W Q 600/600 (1.000)         | 3996                    | 4000                | 45.0  |
| 2   | 6      | 2R Nordstar 602 150W E MH Recessed Downlight (1.000) | 8400                    | 12000               | 150.0 |

Total: 218225 Total: 240000 2790.0

Specific connected load:  $8.27 \text{ W/m}^2 = 1.70 \text{ W/m}^2/100 \text{ lx}$  (Ground area:  $337.41 \text{ m}^2$ )

Operator  
Telephone  
Fax  
e-Mail

## Гардеробно жени / Summary



Height of Room: 2.700 m, Mounting Height: 2.700 m, Maintenance factor: 0.80

Values in Lux, Scale 1:36

| Surface   | $\rho$ [%] | $E_{av}$ [lx] | $E_{min}$ [lx] | $E_{max}$ [lx] | $u_0$ |
|-----------|------------|---------------|----------------|----------------|-------|
| Workplane | /          | 246           | 17             | 323            | 0.069 |
| Floor     | 16         | 196           | 4.90           | 323            | 0.025 |
| Ceiling   | 70         | 89            | 52             | 193            | 0.578 |
| Walls (4) | 50         | 129           | 1.02           | 746            | /     |

**Workplane:**

Height: 0.000 m  
Grid: 64 x 32 Points  
Boundary Zone: 0.000 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.517, Ceiling / Working Plane: 0.358.

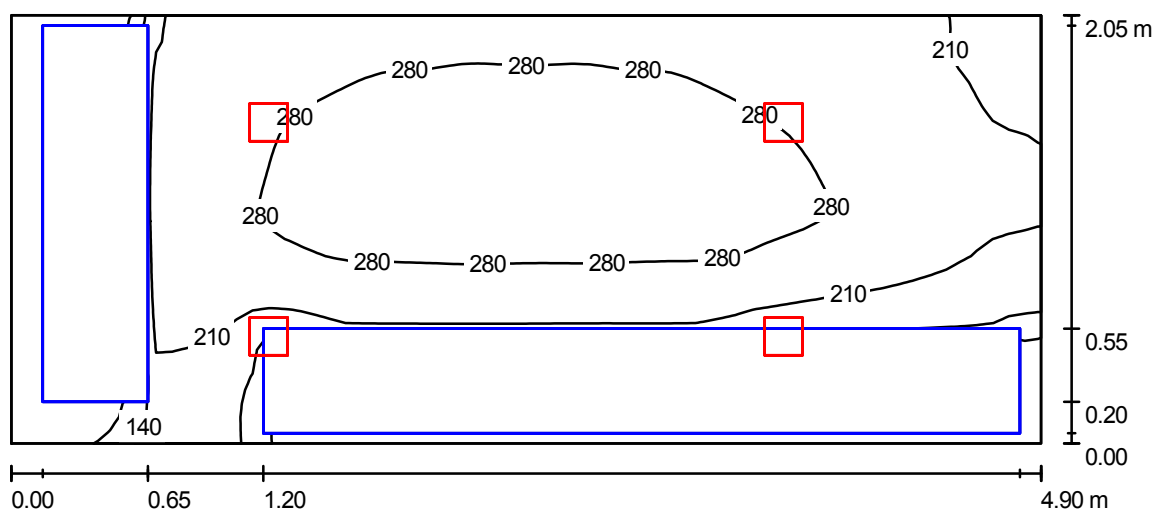
**Luminaire Parts List**

| No.    | Pieces | Designation (Correction Factor)                | $\Phi$ (Luminaire) [lm] | $\Phi$ (Lamps) [lm] | P [W] |
|--------|--------|--|-------------------------|---------------------|-------|
| 1      | 4      | 2R Ltd LED Downlight CAPRI R/S 24W LED (1.000) | 1898                    | 1900                | 24.0  |
| Total: |        |  | 7591                    | 7600                | 96.0  |

Specific connected load:  $10.31 \text{ W/m}^2 = 4.19 \text{ W/m}^2/100 \text{ lx}$  (Ground area:  $9.31 \text{ m}^2$ )

Operator  
Telephone  
Fax  
e-Mail

## Гардеробно мъже / Summary



Height of Room: 2.700 m, Mounting Height: 2.700 m, Maintenance factor: 0.80

Values in Lux, Scale 1:36

| Surface   | $\rho$ [%] | $E_{av}$ [lx] | $E_{min}$ [lx] | $E_{max}$ [lx] | $u_0$ |
|-----------|------------|---------------|----------------|----------------|-------|
| Workplane | /          | 234           | 8.36           | 313            | 0.036 |
| Floor     | 20         | 172           | 2.44           | 312            | 0.014 |
| Ceiling   | 70         | 87            | 49             | 177            | 0.561 |
| Walls (4) | 50         | 110           | 1.08           | 660            | /     |

**Workplane:**

Height: 0.000 m  
Grid: 64 x 32 Points  
Boundary Zone: 0.000 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.473, Ceiling / Working Plane: 0.370.

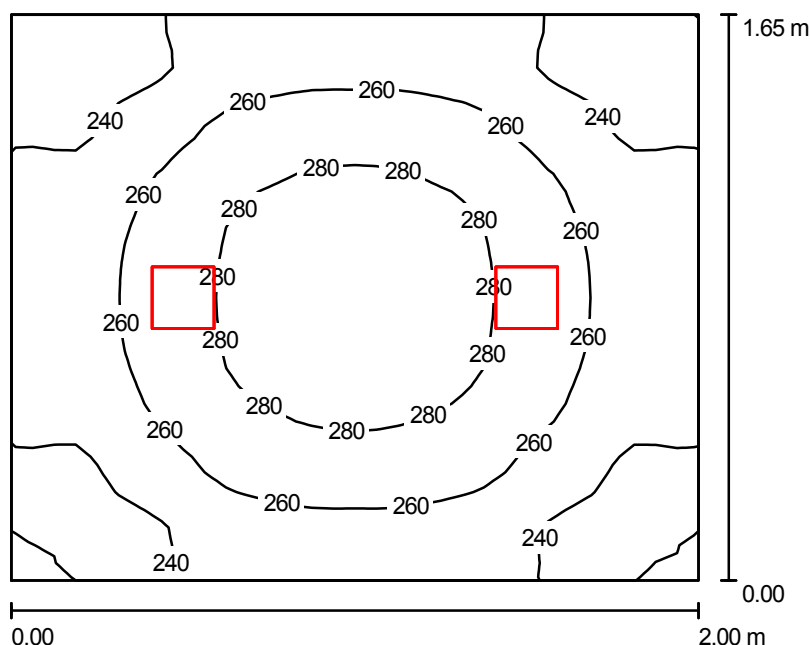
**Luminaire Parts List**

| No.    | Pieces | Designation (Correction Factor)                | $\Phi$ (Luminaire) [lm] | $\Phi$ (Lamps) [lm] | P [W] |
|--------|--------|--|-------------------------|---------------------|-------|
| 1      | 4      | 2R Ltd LED Downlight CAPRI R/S 24W LED (1.000) | 1898                    | 1900                | 24.0  |
| Total: |        |  | 7591                    | 7600                | 96.0  |

Specific connected load:  $9.56 \text{ W/m}^2 = 4.08 \text{ W/m}^2/100 \text{ lx}$  (Ground area:  $10.04 \text{ m}^2$ )

Operator  
Telephone  
Fax  
e-Mail

## Умивалня жени / Summary



Height of Room: 2.700 m, Mounting Height: 2.700 m, Maintenance factor: 0.80

Values in Lux, Scale 1:22

| Surface   | $\rho$ [%] | $E_{av}$ [lx] | $E_{min}$ [lx] | $E_{max}$ [lx] | $u0$  |
|-----------|------------|---------------|----------------|----------------|-------|
| Workplane | /          | 257           | 214            | 290            | 0.831 |
| Floor     | 20         | 258           | 212            | 290            | 0.823 |
| Ceiling   | 70         | 114           | 81             | 144            | 0.704 |
| Walls (4) | 50         | 227           | 94             | 625            | /     |

### Workplane:

Height: 0.000 m  
Grid: 32 x 32 Points  
Boundary Zone: 0.000 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.877, Ceiling / Working Plane: 0.444.

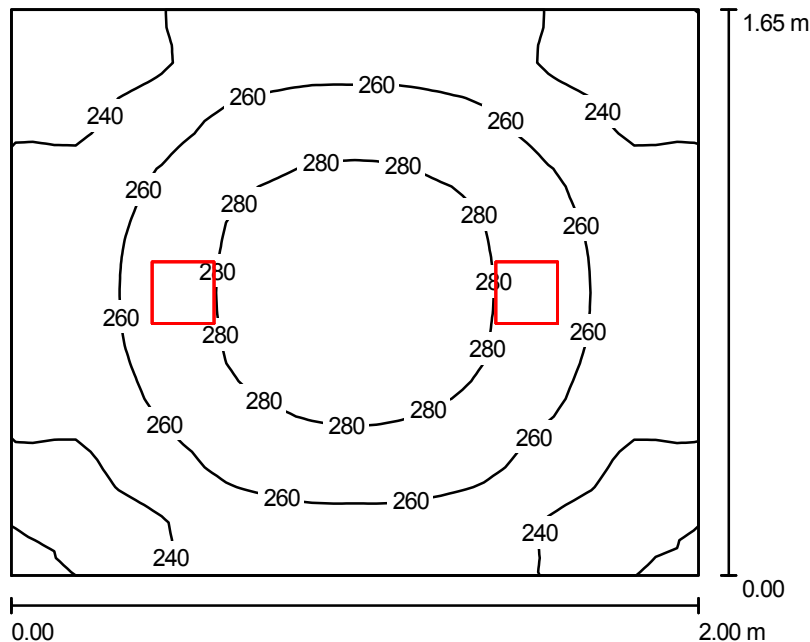
### Luminaire Parts List

| No.    | Pieces | Designation (Correction Factor)                | $\Phi$ (Luminaire) [lm] | $\Phi$ (Lamps) [lm] | P [W] |
|--------|--------|--|-------------------------|---------------------|-------|
| 1      | 2      | 2R Ltd LED Downlight CAPRI R/S 24W LED (1.000) | 1898                    | 1900                | 24.0  |
| Total: |        |  | 3795                    | 3800                | 48.0  |

Specific connected load:  $14.55 \text{ W/m}^2 = 5.65 \text{ W/m}^2/100 \text{ lx}$  (Ground area:  $3.30 \text{ m}^2$ )

Operator  
Telephone  
Fax  
e-Mail

## Умивалня мъже / Summary



Height of Room: 2.700 m, Mounting Height: 2.700 m, Maintenance factor: 0.80

Values in Lux, Scale 1:22

| Surface   | $\rho$ [%] | $E_{av}$ [lx] | $E_{min}$ [lx] | $E_{max}$ [lx] | $u_0$ |
|-----------|------------|---------------|----------------|----------------|-------|
| Workplane | /          | 257           | 214            | 290            | 0.831 |
| Floor     | 20         | 258           | 212            | 290            | 0.823 |
| Ceiling   | 70         | 114           | 81             | 144            | 0.704 |
| Walls (4) | 50         | 227           | 94             | 625            | /     |

### Workplane:

Height: 0.000 m  
Grid: 32 x 32 Points  
Boundary Zone: 0.000 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.877, Ceiling / Working Plane: 0.444.

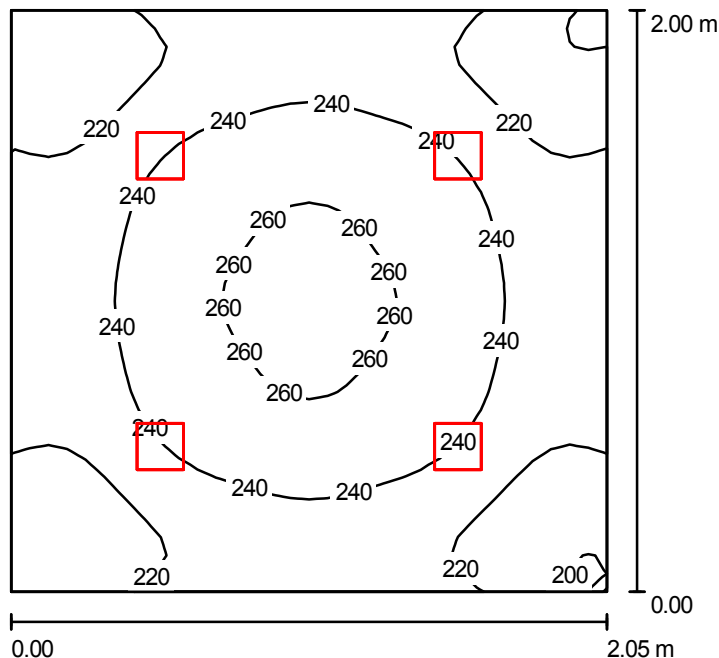
### Luminaire Parts List

| No.    | Pieces | Designation (Correction Factor)                | $\Phi$ (Luminaire) [lm] | $\Phi$ (Lamps) [lm] | P [W] |
|--------|--------|--|-------------------------|---------------------|-------|
| 1      | 2      | 2R Ltd LED Downlight CAPRI R/S 24W LED (1.000) | 1898                    | 1900                | 24.0  |
| Total: |        |  | 3795                    | 3800                | 48.0  |

Specific connected load:  $14.55 \text{ W/m}^2 = 5.65 \text{ W/m}^2/100 \text{ lx}$  (Ground area:  $3.30 \text{ m}^2$ )

Operator  
Telephone  
Fax  
e-Mail

## Душове жени / Summary



Height of Room: 2.700 m, Mounting Height: 2.700 m, Maintenance factor: 0.80

Values in Lux, Scale 1:26

| Surface   | $\rho$ [%] | $E_{av}$ [lx] | $E_{min}$ [lx] | $E_{max}$ [lx] | $u0$  |
|-----------|------------|---------------|----------------|----------------|-------|
| Workplane | /          | 234           | 197            | 264            | 0.841 |
| Floor     | 20         | 234           | 189            | 264            | 0.807 |
| Ceiling   | 70         | 102           | 78             | 117            | 0.763 |
| Walls (4) | 50         | 199           | 90             | 388            | /     |

### Workplane:

Height: 0.000 m  
Grid: 32 x 32 Points  
Boundary Zone: 0.000 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.850, Ceiling / Working Plane: 0.434.

### Luminaire Parts List

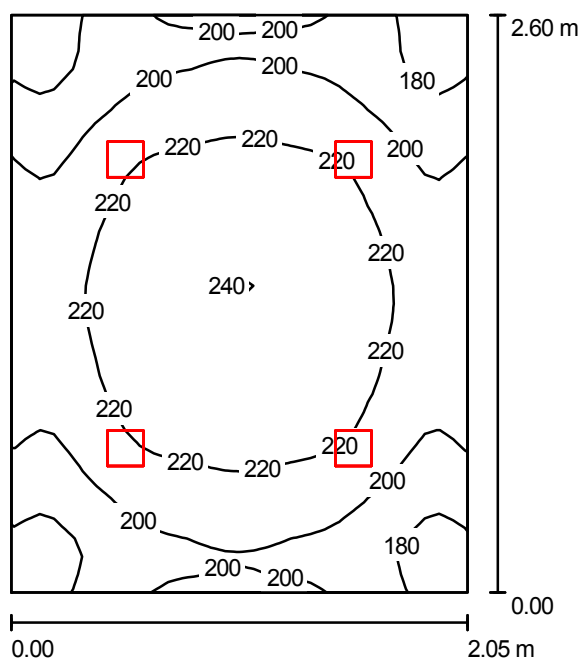
| No.    | Pieces | Designation (Correction Factor)                | $\Phi$ (Luminaire) [lm] | $\Phi$ (Lamps) [lm] | P [W] |
|--------|--------|--|-------------------------|---------------------|-------|
| 1      | 4      | 2R Ltd LED Downlight CAPRI R/S 12W LED (1.000) | 959                     | 960                 | 12.0  |
| Total: |        |  | 3835                    | 3840                | 48.0  |

Specific connected load:  $11.71 \text{ W/m}^2 = 5.00 \text{ W/m}^2/100 \text{ lx}$  (Ground area:  $4.10 \text{ m}^2$ )



Operator  
Telephone  
Fax  
e-Mail

## Душове мъже / Summary



Height of Room: 2.700 m, Mounting Height: 2.700 m, Maintenance factor: 0.80

Values in Lux, Scale 1:34

| Surface   | $\rho$ [%] | $E_{av}$ [lx] | $E_{min}$ [lx] | $E_{max}$ [lx] | $u_0$ |
|-----------|------------|---------------|----------------|----------------|-------|
| Workplane | /          | 210           | 165            | 240            | 0.785 |
| Floor     | 20         | 210           | 164            | 240            | 0.780 |
| Ceiling   | 70         | 79            | 58             | 90             | 0.734 |
| Walls (4) | 50         | 162           | 70             | 344            | /     |

### Workplane:

Height: 0.000 m  
Grid: 32 x 32 Points  
Boundary Zone: 0.000 m

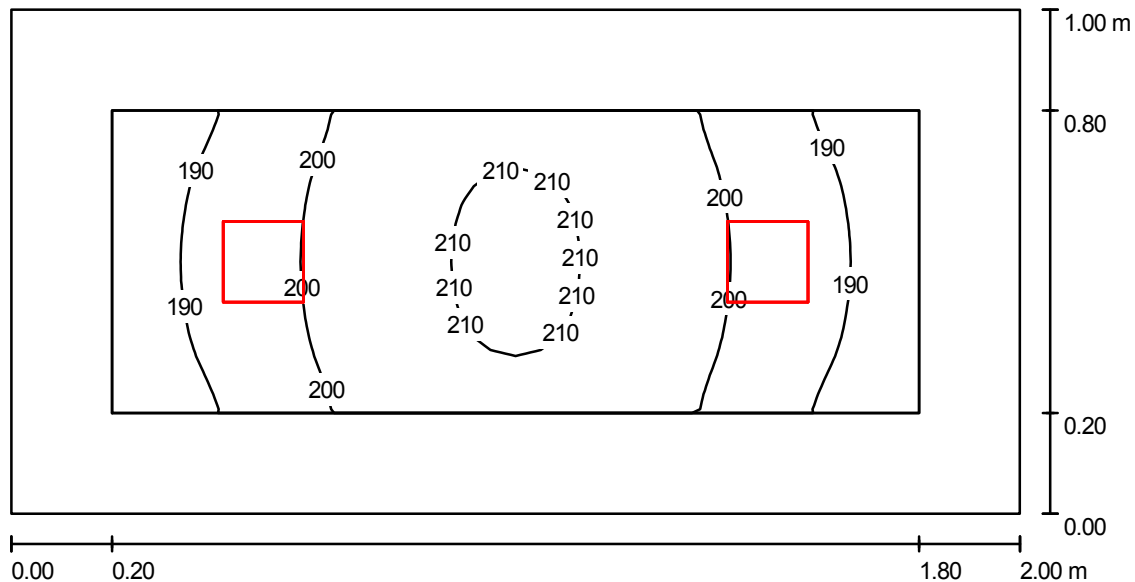
Illuminance Quotient (according to LG7): Walls / Working Plane: 0.775, Ceiling / Working Plane: 0.377.

### Luminaire Parts List

| No.    | Pieces | Designation (Correction Factor)                | $\Phi$ (Luminaire) [lm] | $\Phi$ (Lamps) [lm] | P [W] |
|--------|--------|--|-------------------------|---------------------|-------|
| 1      | 4      | 2R Ltd LED Downlight CAPRI R/S 12W LED (1.000) | 959                     | 960                 | 12.0  |
| Total: |        |  | 3835                    | 3840                | 48.0  |

Specific connected load:  $9.01 \text{ W/m}^2 = 4.29 \text{ W/m}^2/100 \text{ lx}$  (Ground area:  $5.33 \text{ m}^2$ )

## WC жени / Summary



Height of Room: 2.700 m, Mounting Height: 2.700 m, Maintenance factor: 0.80

Values in Lux, Scale 1:15

| Surface   | $\rho$ [%] | $E_{av}$ [lx] | $E_{min}$ [lx] | $E_{max}$ [lx] | u0    |
|-----------|------------|---------------|----------------|----------------|-------|
| Workplane | /          | 199           | 182            | 213            | 0.916 |
| Floor     | 20         | 137           | 120            | 151            | 0.875 |
| Ceiling   | 70         | 91            | 67             | 102            | 0.736 |
| Walls (4) | 50         | 155           | 50             | 364            | /     |

**Workplane:**

Height: 0.500 m  
Grid: 32 x 16 Points  
Boundary Zone: 0.200 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.879, Ceiling / Working Plane: 0.457.

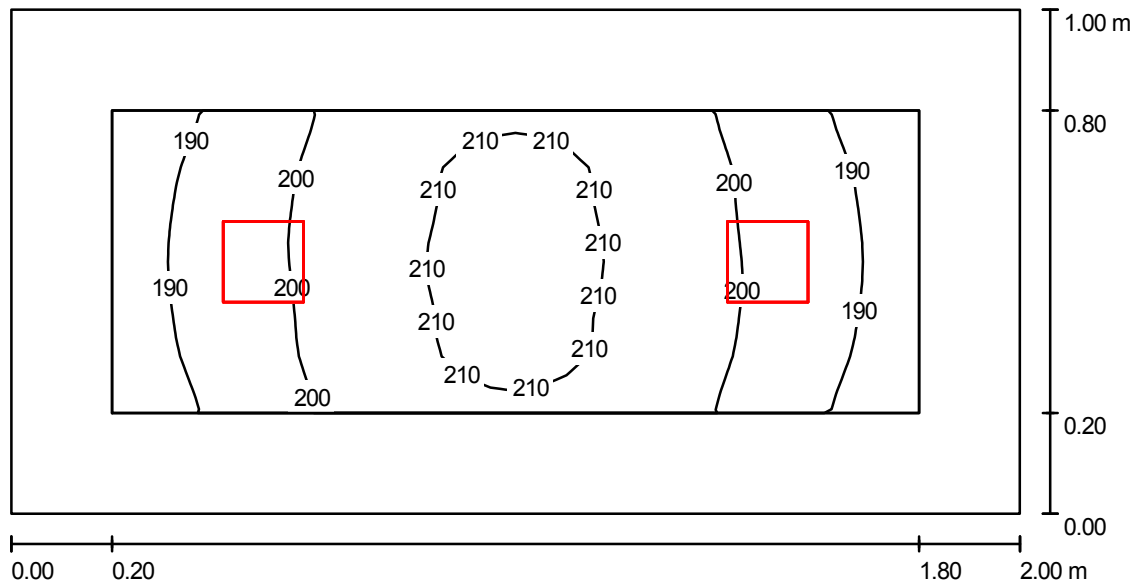
## Luminaire Parts List

| No.    | Pieces | Designation (Correction Factor)                | Φ (Luminaire) [lm] | Φ (Lamps) [lm] | P [W] |
|--------|--------|--|--------------------|----------------|-------|
| 1      | 2      | 2R Ltd LED Downlight CAPRI R/S 12W LED (1.000) | 959                | 960            | 12.0  |
| Total: |        |  | 1918               | 1920           | 24.0  |

Specific connected load:  $12.00 \text{ W/m}^2 = 6.03 \text{ W/m}^2/100 \text{ lx}$  (Ground area:  $2.00 \text{ m}^2$ )

Operator  
Telephone  
Fax  
e-Mail

## WC мъже / Summary



Height of Room: 2.700 m, Mounting Height: 2.700 m, Maintenance factor: 0.80

Values in Lux, Scale 1:15

| Surface   | $\rho$ [%] | $E_{av}$ [lx] | $E_{min}$ [lx] | $E_{max}$ [lx] | $u_0$ |
|-----------|------------|---------------|----------------|----------------|-------|
| Workplane | /          | 201           | 184            | 214            | 0.916 |
| Floor     | 30         | 140           | 122            | 153            | 0.877 |
| Ceiling   | 70         | 93            | 69             | 104            | 0.739 |
| Walls (4) | 50         | 158           | 56             | 366            | /     |

### Workplane:

Height: 0.500 m  
Grid: 32 x 16 Points  
Boundary Zone: 0.200 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.883, Ceiling / Working Plane: 0.463.

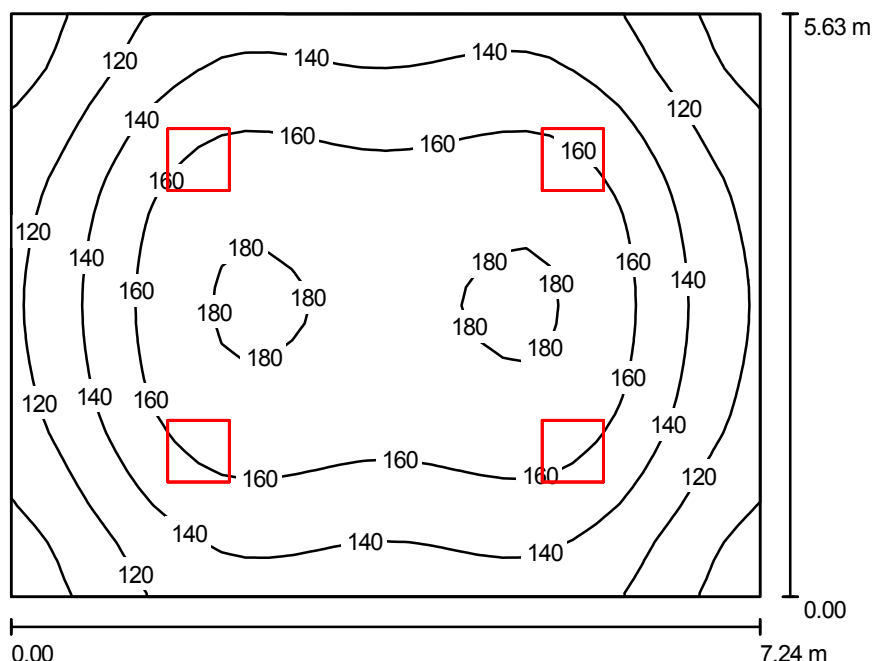
### Luminaire Parts List

| No.    | Pieces | Designation (Correction Factor)                | $\Phi$ (Luminaire) [lm] | $\Phi$ (Lamps) [lm] | P [W] |
|--------|--------|--|-------------------------|---------------------|-------|
| 1      | 2      | 2R Ltd LED Downlight CAPRI R/S 12W LED (1.000) | 959                     | 960                 | 12.0  |
| Total: |        |  | 1918                    | 1920                | 24.0  |

Specific connected load:  $12.00 \text{ W/m}^2 = 5.98 \text{ W/m}^2/100 \text{ lx}$  (Ground area:  $2.00 \text{ m}^2$ )

Operator  
Telephone  
Fax  
e-Mail

## Склад за спортен инвентар / Summary



Height of Room: 3.600 m, Mounting Height: 3.600 m, Maintenance factor: 0.80

Values in Lux, Scale 1:73

| Surface   | $\rho$ [%] | $E_{av}$ [lx] | $E_{min}$ [lx] | $E_{max}$ [lx] | $u_0$ |
|-----------|------------|---------------|----------------|----------------|-------|
| Workplane | /          | 147           | 88             | 183            | 0.601 |
| Floor     | 20         | 147           | 86             | 183            | 0.587 |
| Ceiling   | 70         | 26            | 21             | 29             | 0.789 |
| Walls (4) | 30         | 86            | 24             | 196            | /     |

### Workplane:

Height: 0.000 m  
Grid: 32 x 32 Points  
Boundary Zone: 0.000 m

### UGR

Left Wall  
Lower Wall  
(CIE, SHR = 1.00.)

### Lengthways-

18  
18

### Across

17  
17

### to luminaire axis

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.581, Ceiling / Working Plane: 0.179.

### Luminaire Parts List

| No.    | Pieces | Designation (Correction Factor)   | $\Phi$ (Luminaire) [lm] | $\Phi$ (Lamps) [lm] | P [W] |
|--------|--------|---|-------------------------|---------------------|-------|
| 1      | 4      | 2R Ltd Neolux E 4x18W VG Fluorescent<br>Luminaires Recessed Mounted (1.000) | 3331                    | 5400                | 72.0  |
| Total: |        |   | 13324                   | 21600               | 288.0 |

Specific connected load:  $7.07 \text{ W/m}^2 = 4.81 \text{ W/m}^2/100 \text{ lx}$  (Ground area:  $40.76 \text{ m}^2$ )