

## Cards print

Partner for Contact:  
Order No.:  
Company:  
Customer No.:

Date: 18.07.2019



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Cards print

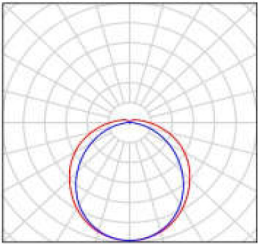
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Cards print / Luminaire parts list

20 Pieces    IBV Hungaria Kft. M18/237 PMMA 771 Favourite  
LED 2x4ft luminaire with Philips Fortimo Strip  
HV5 2000lm/foot moduls with PMMA opal diffusor  
Article No.: M18/237 PMMA  
Luminous flux (Luminaire): 8117 lm  
Luminous flux (Lamps): 8910 lm  
Luminaire Wattage: 59.0 W  
Luminaire classification according to CIE: 94  
CIE flux code: 45 75 92 94 91  
Fitting: 1 x Philips Fortimo LED Strip 2\*1ft  
2000lm+2ft 4000lm 840 FC HV5 (Correction  
Factor 1.000).

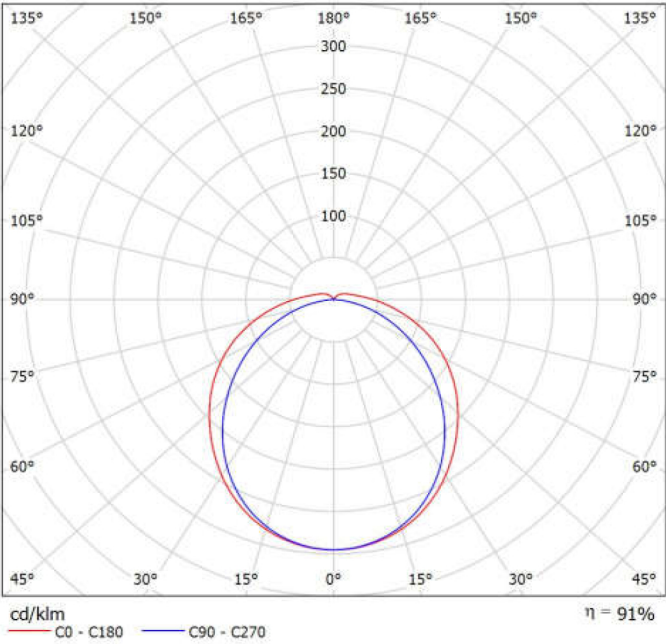
See our luminaire  
catalog for an image of  
the luminaire.



IBV Hungaria Kft. M18/237 PMMA 771 Favourite LED 2x4ft luminaire with Philips Fortimo Strip HV5 2000lm/foot moduls with PMMA opal diffusor / Luminaire Data Sheet

Luminous emittance 1:

See our luminaire catalog for an image of the luminaire.



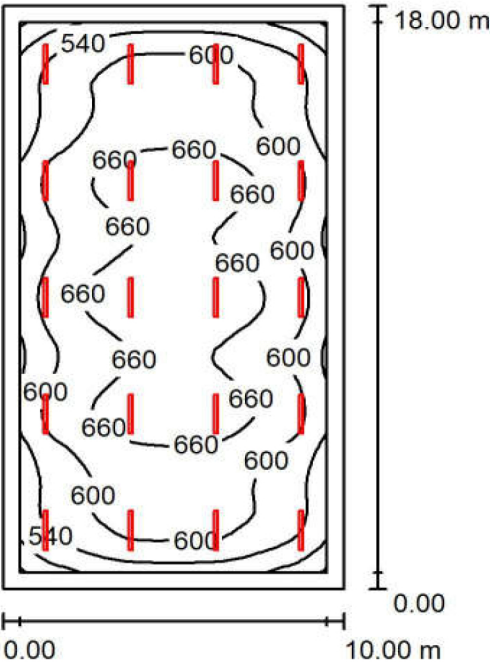
Luminaire classification according to CIE: 94  
CIE flux code: 45 75 92 94 91

Luminous emittance 1:

| Glare Evaluation According to UGR                                |     |   |      |      |      |      |  |      |      |      |      |
|--|-----|---|------|------|------|------|--|------|------|------|------|
| ρ Ceiling  |     | 70  | 70   | 50   | 50   | 30   | 70   | 70   | 50   | 50   | 30   |
| ρ Walls  |     | 50  | 30   | 50   | 30   | 30   | 50   | 30   | 50   | 30   | 30   |
| ρ Floor  |     | 20  | 20   | 20   | 20   | 20   | 20   | 20   | 20   | 20   | 20   |
| Room Size<br>X      Y  |     | Viewing direction at right angles<br>to lamp axis |      |      |      |      | Viewing direction parallel<br>to lamp axis |      |      |      |      |
| 2H   | 2H  | 21.1  | 22.3 | 21.4 | 22.7 | 23.0 | 20.7                                       | 22.0 | 21.1 | 22.3 | 22.7 |
|  | 3H  | 23.0  | 24.2 | 23.4 | 24.5 | 24.9 | 22.3                                       | 23.5 | 22.7 | 23.8 | 24.2 |
|  | 4H  | 23.8  | 24.9 | 24.3 | 25.3 | 25.7 | 22.8                                       | 23.9 | 23.3 | 24.3 | 24.7 |
|  | 6H  | 24.6  | 25.6 | 25.0 | 26.0 | 26.4 | 23.2                                       | 24.2 | 23.7 | 24.6 | 25.1 |
|  | 8H  | 24.9  | 25.9 | 25.3 | 26.3 | 26.7 | 23.3                                       | 24.3 | 23.8 | 24.7 | 25.2 |
|  | 12H | 25.2  | 26.1 | 25.6 | 26.5 | 27.0 | 23.3                                       | 24.3 | 23.8 | 24.7 | 25.2 |
| 4H   | 2H  | 21.5  | 22.6 | 21.9 | 23.0 | 23.4 | 21.2                                       | 22.3 | 21.7 | 22.7 | 23.1 |
|  | 3H  | 23.7  | 24.6 | 24.1 | 25.0 | 25.5 | 23.0                                       | 24.0 | 23.5 | 24.4 | 24.9 |
|  | 4H  | 24.6  | 25.5 | 25.1 | 25.9 | 26.4 | 23.8                                       | 24.6 | 24.2 | 25.0 | 25.5 |
|  | 6H  | 25.5  | 26.3 | 26.0 | 26.8 | 27.3 | 24.2                                       | 25.0 | 24.8 | 25.5 | 26.0 |
|  | 8H  | 25.9  | 26.6 | 26.5 | 27.1 | 27.7 | 24.4                                       | 25.1 | 24.9 | 25.6 | 26.1 |
|  | 12H | 26.3  | 26.9 | 26.8 | 27.4 | 28.0 | 24.5                                       | 25.1 | 25.0 | 25.6 | 26.2 |
| 8H   | 4H  | 24.9  | 25.6 | 25.4 | 26.1 | 26.6 | 24.1                                       | 24.8 | 24.6 | 25.3 | 25.8 |
|  | 6H  | 25.9  | 26.5 | 26.5 | 27.0 | 27.6 | 24.7                                       | 25.3 | 25.3 | 25.8 | 26.4 |
|  | 8H  | 26.4  | 26.9 | 27.0 | 27.5 | 28.1 | 25.0                                       | 25.5 | 25.6 | 26.0 | 26.6 |
|  | 12H | 26.9  | 27.4 | 27.5 | 27.9 | 28.6 | 25.2                                       | 25.6 | 25.7 | 26.2 | 26.8 |
| 12H  | 4H  | 24.9  | 25.5 | 25.4 | 26.0 | 26.6 | 24.1                                       | 24.8 | 24.7 | 25.3 | 25.8 |
|  | 6H  | 26.0  | 26.5 | 26.5 | 27.0 | 27.6 | 24.9                                       | 25.4 | 25.4 | 25.9 | 26.5 |
|  | 8H  | 26.5  | 27.0 | 27.1 | 27.5 | 28.2 | 25.1                                       | 25.6 | 25.7 | 26.1 | 26.8 |
| Variation of the observer position for the luminaire distances S |     |   |      |      |      |      |  |      |      |      |      |
| S = 1.0H   |     | +0.1 / -0.1                                       |      |      |      |      | +0.1 / -0.1                                |      |      |      |      |
| S = 1.5H   |     | +0.2 / -0.3                                       |      |      |      |      | +0.2 / -0.4                                |      |      |      |      |
| S = 2.0H   |     | +0.3 / -0.5                                       |      |      |      |      | +0.4 / -0.8                                |      |      |      |      |
| Standard table   |     | BK07  |      |      |      |      | BK05                                       |      |      |      |      |
| Correction   |     | 2.0   |      |      |      |      | -0.1                                       |      |      |      |      |
| Summand  |     |   |      |      |      |      |  |      |      |      |      |
| Corrected Glare Indices referring to 8910lm Total Luminous Flux  |     |   |      |      |      |      |  |      |      |      |      |



Room 1 / Summary



Height of Room: 4.000 m, Mounting Height: 4.000 m, Maintenance factor: 0.80

Values in Lux, Scale 1:250

| Surface   | $\rho$ [%] | $E_{av}$ [lx] | $E_{min}$ [lx] | $E_{max}$ [lx] | $u0$  |
|-----------|------------|---------------|----------------|----------------|-------|
| Workplane | /          | 611✓          | 419            | 703            | 0.685 |
| Floor     | 20         | 545           | 337            | 653            | 0.619 |
| Ceiling   | 70         | 183           | 131            | 998            | 0.715 |
| Walls (4) | 50         | 366           | 184            | 637            | /     |

| Workplane:   |                | UGR                | Lengthways- | Across | to luminaire axis |
|--|----------------|--------------------|-------------|--------|-------------------|
| Height:  | 0.750 m        | Left Wall          | 25          | 24     |                   |
| Grid:  | 64 x 32 Points | Lower Wall         | 26          | 24     |                   |
| Boundary Zone:   | 0.500 m        | (CIE, SHR = 1.00.) |             |        |                   |
| Illuminance Quotient (according to LG7): Walls / Working Plane: 0.620, Ceiling / Working Plane: 0.299. |                |                    |             |        |                   |

Luminaire Parts List

| No.    | Pieces | Designation (Correction Factor)   | $\Phi$ (Luminaire) [lm] | $\Phi$ (Lamps) [lm] | P [W]   |
|--------|--------|---|-------------------------|---------------------|---------|
| 1      | ✓ 20   | IBV Hungaria Kft. M18/237 PMMA 771<br>Favourite LED 2x4ft luminaire with Philips<br>Fortimo Strip HV5 2000lm/foot moduls with<br>PMMA opal diffusor (1.000) | 8117                    | 8910                | 59.0    |
| Total: |        |   | 162340                  | 178200              | 1180.4✓ |

Specific connected load: 6.56 W/m² = 1.07 W/m²/100 lx (Ground area: 180.00 m²)



Room 1 / Photometric Results

Total Luminous Flux: 162340 lm  
Total Load: 1180.4 W  
Maintenance factor: 0.80  
Boundary Zone: 0.500 m

| Surface   | Average illuminances [lx] |          |       | Reflection factor [%] | Average luminance [cd/m²] |
|-----------|---------------------------|----------|-------|-----------------------|---------------------------|
|           | direct                    | indirect | total |                       |                           |
| Workplane | 462                       | 149      | 611   | /                     | /                         |
| Floor     | 394                       | 151      | 545   | 20                    | 35                        |
| Ceiling   | 41                        | 143      | 183   | 70                    | 41                        |
| Wall 1    | 194                       | 136      | 329   | 50                    | 52                        |
| Wall 2    | 251                       | 137      | 388   | 50                    | 62                        |
| Wall 3    | 194                       | 139      | 332   | 50                    | 53                        |
| Wall 4    | 251                       | 134      | 385   | 50                    | 61                        |

|   |                    |             |        |                   |
|---|--------------------|-------------|--------|-------------------|
| Uniformity on the working plane                   | UGR                | Lengthways- | Across | to luminaire axis |
| u0: 0.685 (1:1)                                   | Left Wall          | 25          | 24     |                   |
| E <sub>min</sub> / E <sub>max</sub> : 0.596 (1:2) | Lower Wall         | 26          | 24     |                   |
|   | (CIE, SHR = 1.00.) |             |        |                   |

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.620, Ceiling / Working Plane: 0.299.

Specific connected load: 6.56 W/m² = 1.07 W/m²/100 lx (Ground area: 180.00 m²)

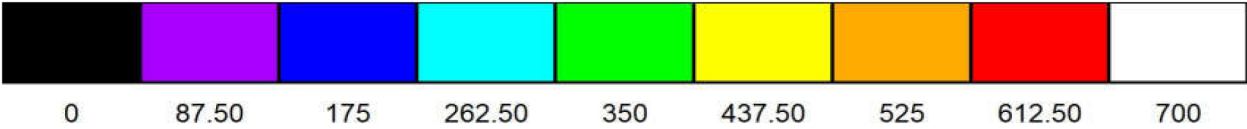
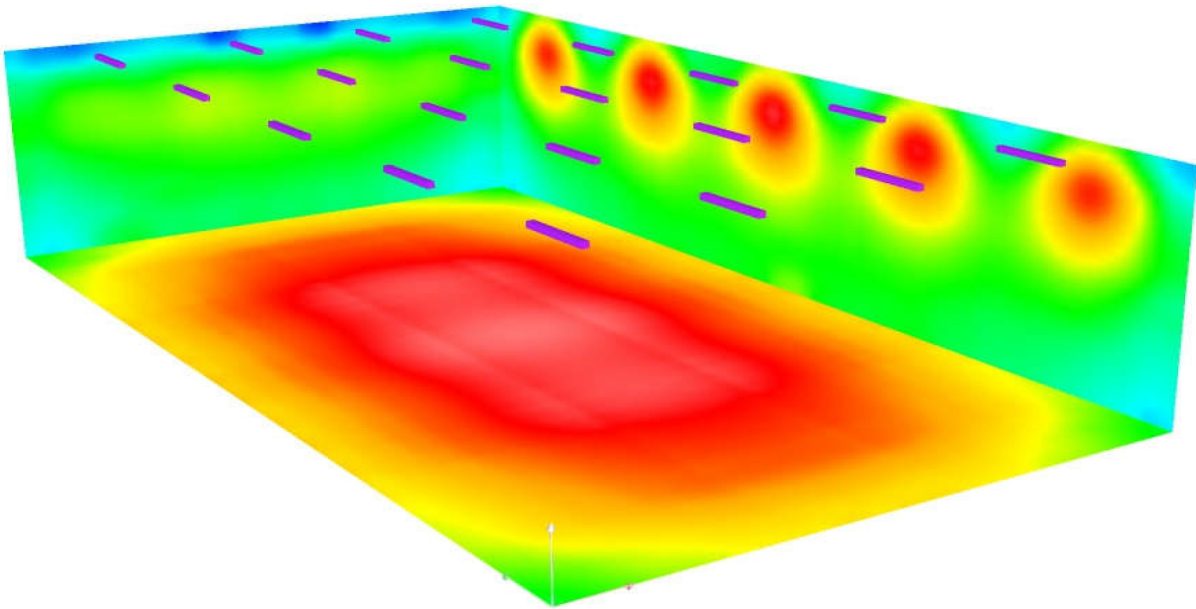


Room 1 / 3D Rendering





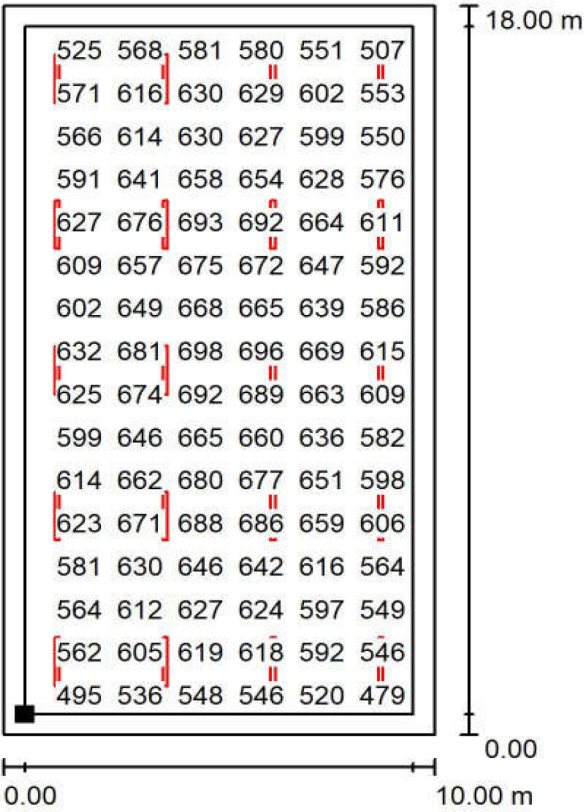
Room 1 / False Colour Rendering



lx



Room 1 / Workplane / Value Chart (E)



Values in Lux, Scale 1 : 200

Not all calculated values could be displayed.

Position of surface in room:  
Working plane with 0.500 m  
Boundary Zone  
Marked point:  
(0.500 m, 0.500 m, 0.750 m)



Grid: 64 x 32 Points

| $E_{av}$ [lx] | $E_{min}$ [lx] | $E_{max}$ [lx] | $u_0$ | $E_{min} / E_{max}$ |
|---------------|----------------|----------------|-------|---------------------|
| 611           | 419            | 703            | 0.685 | 0.596               |