



GX5.3 specular 50 mm



GX5.3 faceted 50 mm



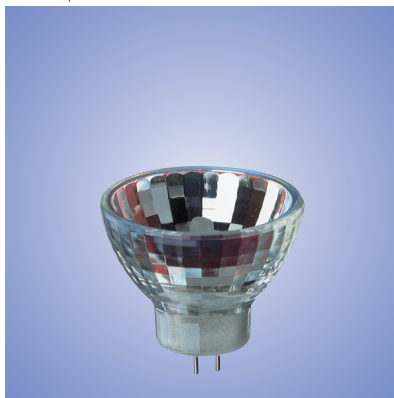
GY5.3 faceted 50 mm



GZ6.35 specular 50 mm



GZ4 specular 35 mm



GZ4 faceted 35 mm



GZ4 stippled 35 mm



GX5.3 faceted 42 mm



GX7.9 smooth 57 mm



GX7.9 smooth 44.5 mm

## Features

Quartz halogen lamps for optical applications with an integral reflector which serves as an efficient mirror condenser system. Their glass reflectors have a dichroic coating which reflects the light forward. But radiates about 75% of the generated heat backwards, keeping temperatures within safe limits. The halogen burner is precisely aligned using an optical system so that no re-alignment is necessary when relamping. They offer negligible light output depreciation and high efficacy.

Low voltage halogen lamps should not be dimmed by more than 10% of their rated voltage since this will result in a reduction in life.

Standard tungsten filament lamps (with no halogen filling), can be dimmed to zero volts, resulting in virtually endless life. However if low voltage tungsten halogen lamps are dimmed by more than 10%, the lamp will be operating at a too low temperature and the free halogens in the gas fill, will attack the cooler parts of the tungsten filament i.e. where enters the quartz or glass envelope. The wire at that point will then be eroded and eventually will fail.

So if dimmed by 10% or more, low voltage tungsten halogen lamps will not have an extended life but are unlikely even to reach their rated life.

## Applications

- 8/16 mm film projection.
- Slide projection.
- Enlargers.
- Minilabs / Colour printers.
- Overhead projection.
- Medical equipment.
- Solar simulation.
- Measuring equipment.
- Fiber optical applications.



| Type  | ANSI Code | LIF Code | J Code         | Fig. | Burning position | Lamp life<br>h | Maximum permissible pinch temp. degr.C | Maximum permissible bulb temp. degr.C | Ordering number |
|-------|-----------|----------|----------------|------|------------------|----------------|----------------------------------------|---------------------------------------|-----------------|
| -     | EKZ       | -        | -              | 1    | ANY              | 200            | 400                                    | 900                                   | 9247 938 16600  |
| -     | EPN       | -        | -              | 1    | ANY              | 50             | 400                                    | 900                                   | 9248 036 17100  |
| -     | EPT       | -        | -              | 1    | ANY              | 8000           | 350                                    | 900                                   | 9248 037 16600  |
| 13938 | -         | -        | -              | 1    | ANY              | 750            | 350                                    | 900                                   | 8222 343 52200  |
| -     | EFN       | -        | -              | 1    | ANY              | 50             | 400                                    | 900                                   | 9248 001 17100  |
| 13139 | -         | -        | -              | 1    | ANY              | 25             | 400                                    | 900                                   | 9238 968 17100  |
| 6853  | EFN       | A1/230   | -              | 1    | ANY              | 50             | 400                                    | 900                                   | 9239 166 17100  |
| -     | DDM       | -        | -              | 1    | ANY              | 50             | 350                                    | 900                                   | 9240 412 19500  |
| -     | EKE/ENA   | -        | -              | 1    | ANY              | 25             | 350                                    | 900                                   | 9248 022 22100  |
| -     | EJY       | -        | -              | 1    | ANY              | 25             | 400                                    | 900                                   | 9248 016 19500  |
| -     | ESJ       | -        | JER 82-85      | 1    | ANY              | 40             | 400                                    | 900                                   | 9248 046 28800  |
| 6834  | EFP       | -        | -              | 1    | ANY              | 50             | 400                                    | 900                                   | 9248 002 17100  |
| 13117 | -         | -        | -              | 1    | ANY              | 1000           | 350                                    | 900                                   | 9239 158 19100  |
| 6423  | EFR       | A1/232   | -              | 1    | ANY              | 50             | 400                                    | 900                                   | 9239 168 18500  |
| -     | -         | -        | JCR 20-150 H5  | 1    | ANY              | 500            | 350                                    | 900                                   | 9248 123 19700  |
| 14527 | EJA       | -        | -              | 1    | ANY              | 40             | 400                                    | 900                                   | 9239 411 19800  |
| 13629 | EKE       | -        | -              | 1    | ANY              | 200            | 400                                    | 900                                   | 9240 103 19800  |
| 5995  | EJM       | -        | -              | 1    | ANY              | 40             | 400                                    | 900                                   | 9239 210 19800  |
| -     | EJV       | -        | -              | 1    | ANY              | 40             | 400                                    | 900                                   | 9247 937 19800  |
| 14529 | DNF       | -        | -              | 2    | ANY              | 25             | 400                                    | 900                                   | 9240 413 19800  |
| -     | ELZ       | -        | -              | 2    | ANY              | 60             | 400                                    | 900                                   | 9247 940 19800  |
| -     | DNE       | -        | -              | 2    | ANY              | 12             | 400                                    | 900                                   | 9247 927 36300  |
| -     | ESD       | -        | -              | 1    | ANY              | 12             | 400                                    | 900                                   | 9248 044 36300  |
| 13164 | EJL       | A1/252   | -              | 1    | ANY              | 50             | 400                                    | 900                                   | 9239 211 20500  |
| 13630 | EWV       | -        | -              | 1    | ANY              | 50             | 400                                    | 900                                   | 9248 052 20577  |
| -     | EMM       | -        | -              | 2    | ANY              | 50             | 400                                    | 900                                   | 9248 033 20500  |
| -     | -         | -        | JER 24-250     | 1    | ANY              | 50             | 400                                    | 900                                   | 9248 139 20577  |
| 13163 | ELC       | A1/259   | -              | 1    | ANY              | 35             | 400                                    | 900                                   | 9239 197 20500  |
| -     | ELC       | A1/259   | -              | 1    | ANY              | 50             | 400                                    | 900                                   | 9248 025 20577  |
| 13631 | ELC/FA    | A1/259   | ELC 24-250/FA  | 1    | ANY              | 50             | 400                                    | 900                                   | 9240 105 20500  |
| -     | ELC/5H    | -        | JCR 24-250 5H  | 1    | ANY              | 500            | 350                                    | 900                                   | 9248 627 20500  |
| 13830 | EVW       | -        | -              | 1    | ANY              | 50             | 400                                    | 900                                   | 9240 060 28800  |
| 13632 | EXY       | -        | -              | 1    | ANY              | 250            | 350                                    | 900                                   | 9240 106 28800  |
| -     | ETJ       | -        | -              | 1    | ANY              | 175            | 400                                    | 900                                   | 9247 949 36300  |
| 13095 | ENH       | -        | -              | 1    | ANY              | 175            | 400                                    | 900                                   | 9239 215 36300  |
| -     | ENH-5     | -        | -              | 1    | ANY              | 175            | 400                                    | 900                                   | 9247 942 35500  |
| 13633 | EXW       | -        | -              | 1    | ANY              | 15             | 400                                    | 900                                   | 9240 107 28800  |
| 13634 | FHS       | -        | -              | 1    | ANY              | 70             | 400                                    | 900                                   | 9240 108 28800  |
| 14502 | EXR       | -        | -              | 1    | ANY              | 35             | 400                                    | 900                                   | 9240 109 28800  |
| -     | EXR-5     | -        | -              | 1    | ANY              | 35             | 400                                    | 900                                   | 9247 950 35500  |
| -     | FHS-5     | -        | -              | 1    | ANY              | 70             | 400                                    | 900                                   | 9247 959 35500  |
| -     | -         | -        | JCR 100-300 X1 | 1    | ANY              | 50             | 400                                    | 900                                   | 9248 119 30900  |
| -     | -         | -        | JCR 100-300    | 1    | ANY              | 50             | 400                                    | 900                                   | 9248 117 30900  |
| 13096 | ELH       | -        | -              | 1    | ANY              | 35             | 400                                    | 900                                   | 9239 209 36300  |
| -     | ENG       | -        | -              | 1    | ANY              | 15             | 400                                    | 900                                   | 9247 941 36300  |
| -     | ELH-5     | -        | -              | 1    | ANY              | 35             | 400                                    | 900                                   | 9239 209 35500  |
| 13098 | ERV       | -        | -              | 1    | ANY              | 75             | 400                                    | 900                                   | 9248 040 23300  |
| 13824 | ENX       | -        | -              | 1    | ANY              | 75             | 400                                    | 900                                   | 9240 058 28800  |
| -     | ENX-5     | -        | -              | 1    | ANY              | 75             | 400                                    | 900                                   | 9247 943 35500  |
| 14526 | FXL       | -        | -              | 1    | ANY              | 50             | 400                                    | 900                                   | 9240 410 28800  |

| Type  | ANSI Code | LIF Code | J Code         | Cap/ Base | Lamp voltage | Lamp wattage | Colour temperature | Reflector diameter in mm | Reflector surface |
|-------|-----------|----------|----------------|-----------|--------------|--------------|--------------------|--------------------------|-------------------|
|       |           |          |                |           | V            | W            | K                  |                          |                   |
| -     | EKZ       | -        | -              | GX5.3     | 10.8         | 30           | 3100               | 50                       | Smooth            |
| -     | EPN       | -        | -              | GX5.3     | 12           | 35           | 3300               | 50                       | Smooth            |
| -     | EPT       | -        | -              | GX5.3     | 10.8         | 42           | 2900               | 50                       | Faceted           |
| 13938 | -         | -        | -              | GX5.3     | 22.8         | 50           | 3200               | 50                       | Smooth            |
| -     | EFN       | -        | -              | GZ6.35    | 12           | 75           | 3400               | 50                       | Smooth            |
| 13139 | -         | -        | -              | GZ6.35    | 12           | 75           | 3400               | 50                       | Smooth            |
| 6853  | EFN       | A1/230   | -              | GZ6.35    | 12           | 75           | 3400               | 50                       | Smooth            |
| -     | DDM       | -        | -              | GX5.3     | 19           | 80           | 3350               | 50                       | Faceted           |
| -     | EKE/ENA   | -        | -              | GX5.3     | 30           | 80           | 3400               | 50                       | Faceted           |
| -     | EJY       | -        | -              | GX5.3     | 19           | 80           | 3400               | 50                       | Smooth            |
| -     | ESJ       | -        | JER 82-85      | GY5.3     | 82           | 85           | -                  | 50                       | Smooth            |
| 6834  | EFP       | -        | -              | GZ6.35    | 12           | 100          | 3400               | 50                       | Smooth            |
| 13117 | -         | -        | -              | GX5.3     | 17           | 150          | 3200               | 50                       | Smooth            |
| 6423  | EFR       | A1/232   | -              | GZ6.35    | 15           | 150          | 3350               | 50                       | Smooth            |
| -     | -         | -        | JCR 20-150 H5  | GX5.3     | 20           | 150          | 3150               | 50                       | Smooth            |
| 14527 | EJA       | -        | -              | GX5.3     | 21           | 150          | 3400               | 50                       | Smooth            |
| 13629 | EKE       | -        | -              | GX5.3     | 21           | 150          | 3400               | 50                       | Smooth            |
| 5995  | EJM       | -        | -              | GX5.3     | 21           | 150          | 3400               | 50                       | Smooth            |
| -     | EJV       | -        | -              | GX5.3     | 21           | 150          | 3400               | 50                       | Smooth            |
| 14529 | DNF       | -        | -              | GX7.9     | 21           | 150          | 3400               | 57                       | Smooth            |
| -     | ELZ       | -        | -              | GX7.9     | 21           | 150          | 3350               | 57                       | Smooth            |
| -     | DNE       | -        | -              | GX7.9     | 120          | 150          | 3350               | 57                       | Smooth            |
| -     | ESD       | -        | -              | GY5.3     | 120          | 150          | -                  | 50                       | Stippled          |
| 13164 | EJL       | A1/252   | -              | GX5.3     | 24           | 200          | 3400               | 50                       | Smooth            |
| 13630 | EWV       | -        | -              | GX5.3     | 24           | 200          | 3350               | 50                       | Faceted           |
| -     | EMM       | -        | -              | GX7.9     | 24           | 250          | 3400               | 44.5                     | Smooth            |
| -     | -         | -        | JER 24-250     | GX5.3     | 24           | 250          | -                  | 50                       | Smooth            |
| 13163 | ELC       | A1/259   | -              | GX5.3     | 24           | 250          | 3400               | 50                       | Smooth            |
| -     | ELC       | A1/259   | -              | GX5.3     | 24           | 250          | 3400               | 50                       | Smooth            |
| 13631 | ELC/FA    | A1/259   | ELC 24-250/FA  | GX5.3     | 24           | 250          | 3400               | 50                       | Faceted           |
| -     | ELC/5H    | -        | JCR 24-250 5H  | GX5.3     | 24           | 250          | 3400               | 50                       | Smooth            |
| 13830 | EVV       | -        | -              | GY5.3     | 82           | 250          | 3300               | 50                       | Faceted           |
| 13632 | EXY       | -        | -              | GX5.3     | 82           | 250          | 3200               | 50                       | Faceted           |
| -     | ETJ       | -        | -              | GY5.3     | 120          | 250          | 3200               | 50                       | Smooth            |
| 13095 | ENH       | -        | -              | GY5.3     | 120          | 250          | 3250               | 50                       | Faceted           |
| -     | ENH-5     | -        | -              | GY5.3     | 125          | 250          | 3250               | 50                       | Faceted           |
| 13633 | EXV       | -        | -              | GX5.3     | 82           | 300          | 3400               | 42                       | Faceted           |
| 13634 | FHS       | -        | -              | GX5.3     | 82           | 300          | 3300               | 42                       | Faceted           |
| 14502 | EXR       | -        | -              | GX5.3     | 82           | 300          | 3350               | 42                       | Faceted           |
| -     | EXR-5     | -        | -              | GX5.3     | 86           | 300          | 3350               | 42                       | Faceted           |
| -     | FHS-5     | -        | -              | GX5.3     | 86           | 300          | 3300               | 42                       | Faceted           |
| -     | -         | -        | JCR 100-300 X1 | GY5.3     | 100          | 300          | 3200               | 50                       | Faceted           |
| -     | -         | -        | JCR 100-300    | GY5.3     | 100          | 300          | 3300               | 50                       | Smooth            |
| 13096 | ELH       | -        | -              | GY5.3     | 120          | 300          | 3350               | 50                       | Faceted           |
| -     | ENG       | -        | -              | GY5.3     | 120          | 300          | 3450               | 50                       | Stippled          |
| -     | ELH-5     | -        | -              | GY5.3     | 125          | 300          | 3350               | 50                       | Faceted           |
| 13098 | ERV       | -        | -              | GX5.3     | 36           | 340          | 3300               | 50                       | Faceted           |
| 13824 | ENX       | -        | -              | GY5.3     | 82           | 360          | 3300               | 50                       | Faceted           |
| -     | ENX-5     | -        | -              | GY5.3     | 86           | 360          | 3300               | 50                       | Faceted           |
| 14526 | FXL       | -        | -              | GY5.3     | 82           | 410          | 3300               | 50                       | Faceted           |

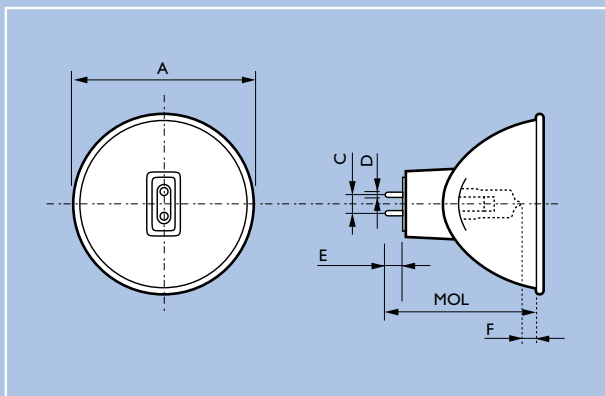


Fig. 1

Dimensions in mm

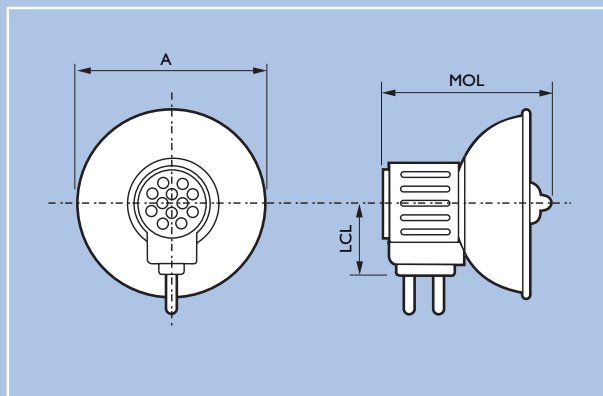
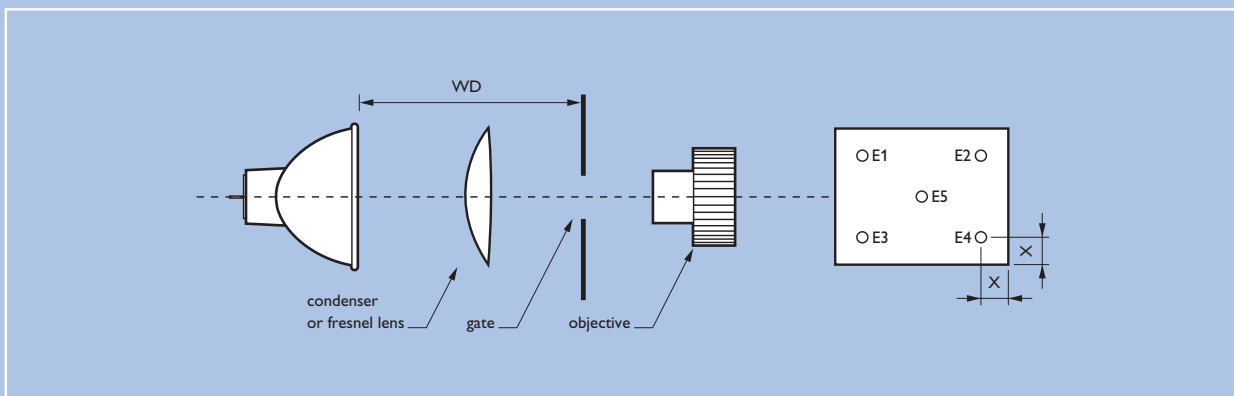
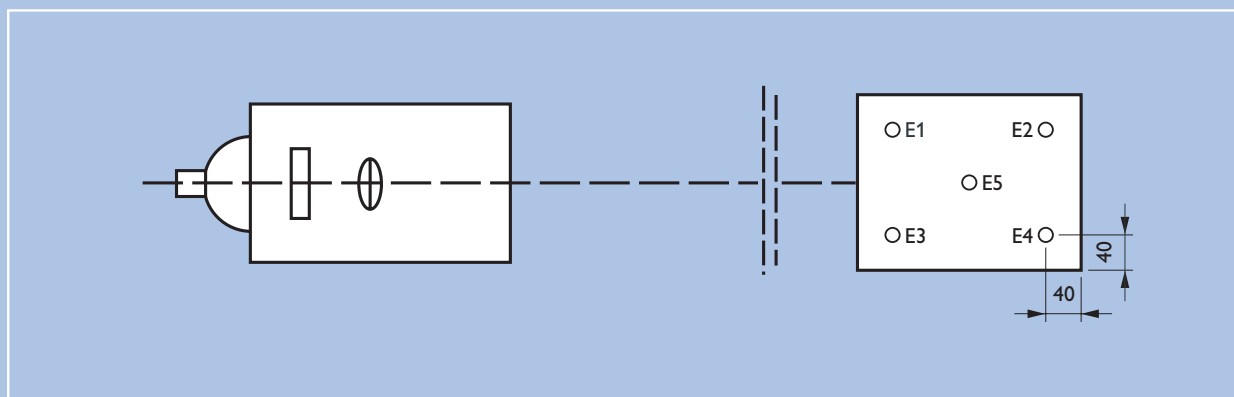


Fig. 2



Optical system



Optical system 13938

| Type  | ANSI Code | LIF Code | J Code         | Fig. | MOL  | A    | LCL max. | C pins centre to centre | D pin diameter | E min. pin length | F max. protruding |
|-------|-----------|----------|----------------|------|------|------|----------|-------------------------|----------------|-------------------|-------------------|
| -     | EKZ       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| -     | EPN       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| -     | EPT       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| 13938 | -         | -        | -              | 1    | 45   | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| -     | EFN       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| 13139 | -         | -        | -              | 1    | 44   | 50   | -        | 6.35                    | 1 ± 0.05       | 6                 | < 0               |
| 6853  | EFN       | A1/230   | -              | 1    | 42   | 50   | -        | 6.35                    | 1 ± 0.05       | 6                 | < 0               |
| -     | DDM       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| -     | EKE/ENA   | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| -     | EJY       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| -     | ESJ       | -        | JER 82-85      | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |
| 6834  | EFF       | -        | -              | 1    | 42   | 50.7 | -        | 6.35                    | 1 ± 0.05       | 6                 | < 0               |
| 13117 | -         | -        | -              | 1    | 47   | 50   | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| 6423  | EFR       | A1/232   | -              | 1    | 42   | 50   | -        | 6.35                    | 1 ± 0.05       | 6                 | < 0               |
| 14527 | EJA       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| 13629 | EKE       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| 5995  | EJM       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| -     | EJV       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| 14529 | DNF       | -        | -              | 2    | 45.1 | 57.2 | 15.9     | -                       | -              | -                 | -                 |
| -     | ELZ       | -        | -              | 2    | 45.1 | 57.2 | 15.9     | -                       | -              | -                 | -                 |
| -     | DNE       | -        | -              | 2    | 49.2 | 57.2 | 15.9     | -                       | -              | -                 | -                 |
| -     | ESD       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |
| 13164 | EJL       | A1/252   | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| 13630 | EWV       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| -     | EMM       | -        | -              | 2    | 47.5 | 44.5 | 15.9     | -                       | -              | -                 | -                 |
| -     | -         | -        | JER 24-250     | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| 13163 | ELC       | A1/259   | -              | 1    | 45   | 50   | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| -     | ELC       | A1/259   | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| 13631 | ELC/FA    | A1/259   | ELC 24-250/FA  | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| -     | ELC/5H    | -        | JCR 24-250 5H  | 1    | 44.5 | 50.7 | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| 13830 | EVV       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |
| 13632 | EXY       | -        | -              | 1    | 44.5 | 42   | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| -     | ETJ       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |
| 13095 | ENH       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |
| -     | ENH-5     | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |
| 13633 | EXW       | -        | -              | 1    | 44.5 | 42   | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| 13634 | FHS       | -        | -              | 1    | 44.5 | 42   | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| 14502 | EXR       | -        | -              | 1    | 44.5 | 42   | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| -     | EXR-5     | -        | -              | 1    | 44.5 | 42   | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| -     | FHS-5     | -        | -              | 1    | 44.5 | 42   | -        | 5.3                     | 1.5            | 4.9 min           | < 0               |
| -     | -         | -        | JCR 100-300 X1 | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |
| -     | -         | -        | JCR 100-300    | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |
| 13096 | ELH       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |
| -     | ENG       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |
| -     | ELH-5     | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |
| 13098 | ERV       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |
| 13824 | ENX       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |
| -     | ENX-5     | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |
| 14526 | FXL       | -        | -              | 1    | 44.5 | 50.7 | -        | 5.3                     | 0.7 × 2.0      | -                 | < 0               |

| Type  | ANSI Code | LIF Code | J Code         | Candle power max. cd | Beam spread in degrees full beam | WD in mm | Dimensions gate            | Condensor | Objective f mm | Objective | Screen size mm | X mm      | Min centre intensity lux | Corner centre ratio % |
|-------|-----------|----------|----------------|----------------------|----------------------------------|----------|----------------------------|-----------|----------------|-----------|----------------|-----------|--------------------------|-----------------------|
| -     | EKZ       | -        | -              | -                    | -                                | 38.1     | 5.36 x 4.01                | yes       | 19             | 1.3       | 500 x 375      | 50 x 50   | 400                      | -                     |
| -     | EPN       | -        | -              | -                    | -                                | 29       | 5.36 x 4.01                | yes       | 19             | 1.3       | 500 x 375      | 50 x 50   | 350                      | 40                    |
| -     | EPT       | -        | -              | -                    | -                                | 29       | 5.36 x 4.01                | yes       | 19             | 1.3       | 500 x 375      | 50 x 50   | 250                      | 20                    |
| 13938 | -         | -        | -              | -                    | -                                | -        | -                          | -         | -              | -         | 356 x 279      | -         | 350                      | 70                    |
| -     | EFN       | -        | -              | -                    | -                                | 32       | 5.36 x 4.01                | yes       | 19             | 1.3       | 500 x 375      | 50 x 50   | 950                      | 50                    |
| 13139 | -         | -        | -              | -                    | -                                | -        | in adapted colour enlarger | -         | -              | -         | -              | 4500      | -                        | -                     |
| 6853  | EFN       | A1/230   | -              | -                    | -                                | 32       | 5.2 x 3.9                  | -         | 11             | 1.1       | 1200 x 900     | 40 x 40   | 250 slm                  | 60                    |
| -     | DDM       | -        | -              | -                    | -                                | 154.2    | 40.9 ø                     | yes       | 100            | 2.9       | 1113 x 835     | 58 x 59   | 680                      | 15                    |
| -     | EKE/ENA   | -        | -              | -                    | -                                | 44.5     | 5.41 x 4.04                | yes       | 19             | 1.3       | 500 x 375      | 50 x 50   | 750                      | 40                    |
| -     | EJY       | -        | -              | -                    | -                                | 38.1     | 5.36 x 4.01                | yes       | 19             | 1.3       | 500 x 375      | 50 x 50   | 900                      | 40                    |
| -     | ESJ       | -        | JER 82-85      | -                    | -                                | 32       | 12 ø                       | yes       | 50             | 1.4       | 1000 x 750     | 52 x 52   | 300                      | 35                    |
| 6834  | FFP       | -        | -              | -                    | -                                | 32       | 5.2 x 3.9                  | -         | 11             | 1.1       | 1200 x 900     | 40 x 40   | 300                      | 62                    |
| 13117 | -         | -        | -              | 23000                | 24                               | -        | -                          | -         | -              | -         | -              | -         | -                        | -                     |
| 6423  | EFR       | A1/232   | -              | -                    | -                                | 32       | 5.2 x 3.9                  | -         | 11             | 1.1       | 1200 x 900     | 40 x 40   | 300                      | 62                    |
| 14527 | EJA       | -        | -              | -                    | -                                | 28       | 5.36 x 4.01                | yes       | 19             | 1.3       | 500 x 375      | 50 x 50   | 1200                     | 50                    |
| 13629 | EKE       | -        | -              | -                    | -                                | 44.5     | 5.36 x 4.01                | yes       | 19             | 1.3       | 500 x 375      | 50 x 50   | 900                      | 45                    |
| 5995  | EJM       | -        | -              | -                    | -                                | 38.1     | 5.36 x 4.01                | yes       | 19             | 1.3       | 500 x 375      | 50 x 50   | 1200                     | 50                    |
| -     | EJV       | -        | -              | -                    | -                                | 44.5     | 5.36 x 4.01                | yes       | 19             | 1.3       | 500 x 375      | 50 x 50   | 1500                     | 40                    |
| 14529 | DNF       | -        | -              | -                    | -                                | 69.1     | 6.6 ø                      | no        | 25             | 1.0       | 500 x 375      | 50 x 50   | 2100                     | 50                    |
| -     | ELZ       | -        | -              | -                    | -                                | 69.1     | 6.6 ø                      | no        | 25             | 1.0       | 500 x 375      | 50 x 50   | 1600                     | 50                    |
| -     | DNE       | -        | -              | -                    | -                                | 69.1     | 5.36 x 4.01                | no        | 15-25          | 1.3       | 500 x 375      | 50 x 50   | 900                      | 40                    |
| -     | ESD       | -        | -              | -                    | -                                | 44.5     | 12 ø                       | yes       | 50             | 1.4       | 1000 x 750     | 52 x 52   | 350                      | 20                    |
| 13164 | EJL       | A1/252   | -              | -                    | -                                | 31.7     | 12 ø                       | yes       | 50             | 1.4       | 1000 x 750     | 52 x 52   | 1100                     | 50                    |
| 13630 | EWf       | -        | -              | -                    | -                                | 298.5    | no gate                    | fresnel   | in 3M          | OHP       | 1500 x 1500    | 250 x 250 | 800                      | 32                    |
| -     | EMM       | -        | -              | -                    | -                                | 65.8     | 12 ø                       | no        | 50             | 1.2       | 1113 x 835     | 58 x 58   | 750                      | 55                    |
| -     | -         | -        | JER 24-250     | -                    | -                                | 31.8     | 12 ø                       | yes       | 50             | 1.4       | 1000 x 750     | 50 x 50   | 900                      | 60                    |
| 13163 | ELC       | A1/259   | -              | -                    | -                                | 32       | 7.05 x 9.65                | no        | 35             | 1.3       | 900 x 1200     | 40 x 40   | 850 slm                  | 60                    |
| -     | ELC       | A1/259   | -              | -                    | -                                | 31.7     | 12 ø                       | yes       | 50             | 1.2       | 1000 x 750     | 52 x 52   | 1500                     | 50                    |
| 13631 | ELC/FA    | A1/259   | ELC 24-250/FA  | -                    | -                                | 31.7     | 12 ø                       | yes       | 50             | 1.2       | 1000 x 750     | 52 x 52   | 1500                     | 50                    |
| -     | ELC/5H    | -        | JCR 24-250 5H  | -                    | -                                | 31.8     | 12 ø                       | yes       | 50             | 1.2       | 1000 x 750     | 52 x 52   | 960                      | 50                    |
| 13830 | EVW       | -        | -              | -                    | -                                | 298.5    | no gate                    | fresnel   | in Sankosya    | OHP       | 1500 x 1500    | 250 x 250 | 1250                     | 40                    |
| 13632 | EXY       | -        | -              | -                    | -                                | 152.4    | no gate                    | yes       | 100            | 2.9       | 1113 x 835     | 58 x 58   | 610                      | 46                    |
| -     | ETJ       | -        | -              | -                    | -                                | 36.5     | 12 ø                       | yes       | 50             | 1.2       | 1000 x 750     | 52 x 52   | 800                      | 25                    |
| 13095 | ENH       | -        | -              | -                    | -                                | 152.4    | no gate                    | yes       | 100            | 2.9       | 1113 x 835     | 58 x 58   | 800                      | 40                    |
| -     | ENH-5     | -        | -              | -                    | -                                | 152.4    | no gate                    | yes       | 100            | 2.9       | 1113 x 835     | 58 x 58   | 700                      | 40                    |
| 13633 | EXVW      | -        | -              | -                    | -                                | 152.4    | no gate                    | yes       | 100            | 2.9       | 1113 x 835     | 58 x 58   | 1200                     | 46                    |
| 13634 | FHS       | -        | -              | -                    | -                                | 152.4    | no gate                    | yes       | 100            | 2.9       | 1113 x 835     | 58 x 58   | 1000                     | 46                    |
| 14502 | EXR       | -        | -              | -                    | -                                | 152.4    | no gate                    | yes       | 100            | 2.9       | 1113 x 835     | 58 x 58   | 1100                     | 46                    |
| -     | EXR-5     | -        | -              | -                    | -                                | 152.4    | no gate                    | yes       | 100            | 2.9       | 1113 x 835     | 58 x 58   | 1100                     | 46                    |
| -     | FHS-5     | -        | -              | -                    | -                                | 152.4    | 40.9 ø                     | yes       | 100            | 2.9       | 1113 x 835     | 58 x 58   | 1000                     | 46                    |
| -     | -         | -        | JCR 100-300 X1 | -                    | -                                | 298.5    | no gate                    | fresnel   | in Sankosya    | OHP       | 1500 x 1500    | 250 x 250 | 1380                     | 40                    |
| -     | -         | -        | JCR 100-300    | -                    | -                                | 31.7     | no gate                    | yes       | 50             | 1.2       | 1000 x 750     | 52 x 52   | 1200                     | 55                    |
| 13096 | ELH       | -        | -              | -                    | -                                | 152.4    | no gate                    | yes       | 85             | 2.8       | 1000 x 1000    | 125 x 125 | 850                      | 45                    |
| -     | ENG       | -        | -              | -                    | -                                | 152.4    | no gate                    | yes       | 100            | 2.9       | 1113 x 835     | 58 x 58   | 1350                     | 35                    |
| -     | ELH-5     | -        | -              | -                    | -                                | 152.4    | no gate                    | yes       | 85             | 2.8       | 1000 x 1000    | 125 x 125 | 1350                     | 40                    |
| 13098 | ERV       | -        | -              | -                    | -                                | 298.5    | no gate                    | fresnel   | in 3M          | OHP       | 1500 x 1500    | 250 x 250 | 1050                     | 27                    |
| 13824 | ENX       | -        | -              | -                    | -                                | 298.5    | no gate                    | fresnel   | in ELMO        | OHP       | 1250 x 1250    | 210 x 210 | 4300                     | 25                    |
| -     | ENX-5     | -        | -              | -                    | -                                | 298.5    | no gate                    | fresnel   | in ELMO        | OHP       | 1250 x 1250    | 210 x 210 | 4300                     | 25                    |
| 14526 | FXL       | -        | -              | -                    | -                                | 298.5    | no gate                    | fresnel   | in ELMO        | OHP       | 1250 x 1250    | 210 x 210 | 4700                     | 34                    |