

# X-ML101000SE4080-IAH0-70-24V-IR

Linear Series

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#### **PRODUCT PHOTO**

# SPECIFICATIONS

- · Default driving method is constant current input
- CCT Range from 1800K up to 6500K
- This module is standard and can be connected as 7 Series 10 Parallel.
- Luminous flux range from 388 lm to 3027 lm
- · Efficacy of the module up to 212 lm/W
- · CRI 80 is standard, CRI 70 and CRI 90 are available
- · Outstanding system color tolerance MacAdam 3 over the full operating area

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- Simple installation (e.g. screw)
- Long life-time > 60,000 hours
- 5 years guarantee at specified conditions



# APPLICATIONS



# PHOTOMETRY



DATASHEET

X-ML101000SE4080-IAH0-70-24V-IR

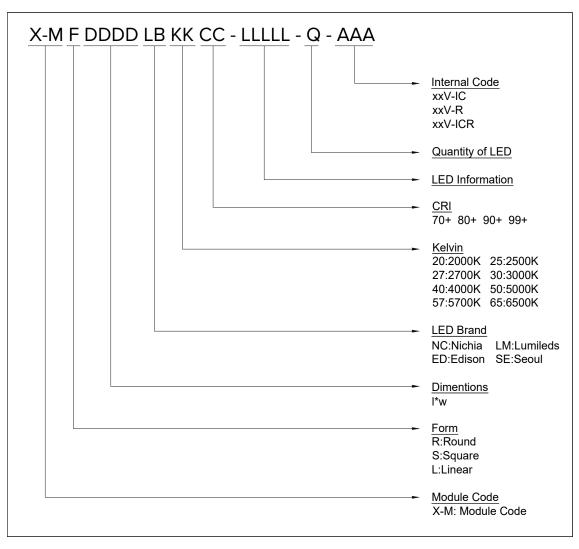


# X-ML101000SE4080-IAH0-70-24V-IR

#### **TECHNICAL DATA**

| Beam Angle                                   | 120°         |                   |                  |  |  |
|--|--------------|-------------------|------------------|--|--|
| Ambient temperature range                    | -25° ~ +55°C |                   |                  |  |  |
| Tc max                                       | 85℃          |                   |                  |  |  |
|  | Seoul IAH0   | Lumileds 2835 2K1 | Lumileds 2835 HE |  |  |
| Max. DC forward current                      | 1050         | 1050              | 1050             |  |  |
| Typical voltage of LED Module at max current | 22,4V        | 22,4V             | 19,46V           |  |  |
| Insulation test voltage                      | 2kV          | 2kV               | 2kV              |  |  |
| ESD classification                           | Class 1      | Class 1           | Class 1          |  |  |
| Risk group (EN 62471:2008)                   | 2            | 2                 | 2                |  |  |
| Type of protection                           | IP00         | IP00              | IP00             |  |  |

#### **ORDERING INFORMATIONS**



DATASHEET



### DRIVING CURRENT VS LUMEN OUTPUT SPECIFICATION

| Comm                               | non Characteristic | [@Tj : 85°C] ; |                       |    |  |  |
|------------------------------------|--------------------|----------------|-----------------------|----|--|--|
| Module Code                        | X-ML101000SE40     | 80-IAH0-70-24V | /-IR                  |    |  |  |
| PCB Material                       | Al                 | U              | Electrical Connection |    |  |  |
| Operating Temperature (°C)         | -40 ~              | +100           | Parallel              | 10 |  |  |
| Storage Temperature (°C)           | -40 ~              | - +40          | Series                | 7  |  |  |
| Thermal Conductivity (W/m-K)       | 1                  | >              | LED Quantity          | 70 |  |  |
| LED                                | Seoul IAH0         |                |                       |    |  |  |
| Correlated Color Temperature (CCT) |                    | 4000K          |                       |    |  |  |
| Color Rendering Index (CRI)        |                    | 80+            |                       |    |  |  |
| Module Operating Voltage (V)       | 24V                | 24V            | 24V                   |    |  |  |
| Module Operating Current (mA)      | 500                | 650            | 800                   |    |  |  |
| Branch Operating Current (mA)      | 50                 | 65             | 80                    |    |  |  |
| Module Power (W)                   | 12,00              | 15,60          | 19,20                 | )  |  |  |
| Module Light Output (lm)           | 1.584              | 2.028          | 2.458                 | 8  |  |  |
| Module Efficiency (lm/W)           | 132                | 130            | 128                   |    |  |  |
| LED                                | Lumileds 2835 2K1  |                |                       |    |  |  |
| Correlated Color Temperature (CCT) |                    | 4000K          |                       |    |  |  |
| Color Rendering Index (CRI)        |                    | 80+            |                       |    |  |  |
| Module Operating Voltage (V)       | 24                 | 24             | 24                    |    |  |  |
| Module Operating Current (mA)      | 500                | 650            | 800                   |    |  |  |
| Branch Operating Current (mA)      | 50                 | 65             | 80                    |    |  |  |
| Module Power (W)                   | 12,00              | 15,60          | 19,20                 | )  |  |  |
| Module Light Output (lm)           | 1.944              | 2.496          | 3.034                 | ļ  |  |  |
| Module Efficiency (lm/W)           | 162                | 160            | 158                   |    |  |  |
| LED                                |                    | Lumileds       | 2835 HE               |    |  |  |
| Correlated Color Temperature (CCT) |                    | 4000K          |                       |    |  |  |
| Color Rendering Index (CRI)        |                    | 80+            |                       |    |  |  |
| Module Operating Voltage (V)       | 24                 | 24             | 24                    |    |  |  |
| Module Operating Current (mA)      | 500                | 650            | 800                   |    |  |  |
| Branch Operating Current (mA)      | 50                 | 65             | 80                    |    |  |  |
| Module Power (W)                   | 12,00              | 15,60          | 19,20                 | )  |  |  |
| Module Light Output (lm)           | 1.956              | 2.527          | 3.091                 |    |  |  |
| Module Efficiency (lm/W)           | 163                | 162            | 161                   |    |  |  |

The table below shows how to Module Light Output changes depending on CCT (K)

| Lumen Output Multiplier |                |                |                |                |                |  |  |  |
|-------------------------|----------------|----------------|----------------|----------------|----------------|--|--|--|
| LED                     | 2700K (CRI 80) | 3000K (CRI 80) | 4000K (CRI 80) | 5000K (CRI 80) | 6500K (CRI 80) |  |  |  |
| Seoul IAH0              | 0,93           | 0,93           | 1              | 1              | 1              |  |  |  |
| Lumileds 2835 2K1       | 0,9696         | 0,985          | 1              | 1              | 1              |  |  |  |
| Lumileds 2835 HE        | 0,97           | 0,961          | 1              | 1              | 1              |  |  |  |

Relative luminous intensity versus CCT (K)

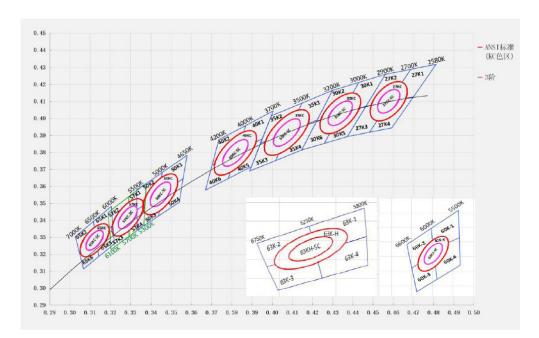


# X-ML101000SE4080-IAH0-70-24V-IR

|   | X-MI 10100    | 0SF        | 4080-144                       | 0-70-24  | V-IR MECHANICAL                     | DRAWINGS               |                         |                          |   |
|---|---------------|------------|--------------------------------|----------|-------------------------------------|------------------------|-------------------------|--------------------------|---|
|   | 1             |            | 2                              |          | 3                                   | 4                      | 5                       | 6                        |   |
| A |               |            |                                |          |                                     |                        |                         |                          | A |
| В |               |            |                                |          | 1000                                | ł                      |                         |                          | В |
| С |               |            |                                |          |                                     |                        |                         |                          | С |
|   | SERBEST Ö     | lçü        | TOLERANSL                      | ARI -DIN | 2768-1 / General Tolera             | ances for linear and a | ngular dimensions ( [   | DIN ISO 2768-1)          |   |
|   |               |            | 0.5 up to 3mm over 3 up to 6mm |          | over 6 up to<br>30mm                | over 30 up to<br>120mm | over 120 up to<br>400mm | over 400 up to<br>1000mm |   |
|   | ± 0.1         |            | ± 0.                           | 1        | ± 0.2                               | ± 0.3                  | ± 0.5                   | ± 0.8                    |   |
|   | Stock code No |            |                                |          | MALZEME (MATERIAL)                  | AGIRLIK (WEIGH         | Г)                      | I                        | 1 |
| _ | Revision 00   |            |                                |          |                                     |                        |                         |                          |   |
| D | Date          | 18.05.2023 |                                |          | TLS-001-10L101000LML28-70-24V-IR-T1 |                        |                         | 1                        |   |
|   | Sheet         |            |                                |          | 123-001-10110100                    | JULIVILZO-7U-Z4V-IN-11 | $\Box \Box \Psi$        | $\frac{1/1}{1/1}$        | ł |
|   | Drawn By      | Esra       | GENC                           |          |                                     |                        |                         |                          |   |
|   | Checked By    | Ibrah      | im OKMEN                       |          |                                     |                        | 1/5 το Li               | ghting Solutions         |   |
|   | Approved By   |            |                                |          |                                     |                        |                         |                          |   |
|   | TLS Teknoloj  | i Sano     | ayi ve Dis Tic                 | aret A.S |                                     |                        |                         |                          |   |

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CONTACT

DATASHEET

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TO Lighting Solutions

