

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 30 Series 4 Parallel.

- Luminous flux range from 665,28 lm to 5190 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
- Simple installation (e.g. screw)
- Long life-time > 60,000 hours
- 5 years guarantee at specified conditions



APPLICATIONS







Architectur Lighting

Office Lighting

PHOTOMETRY

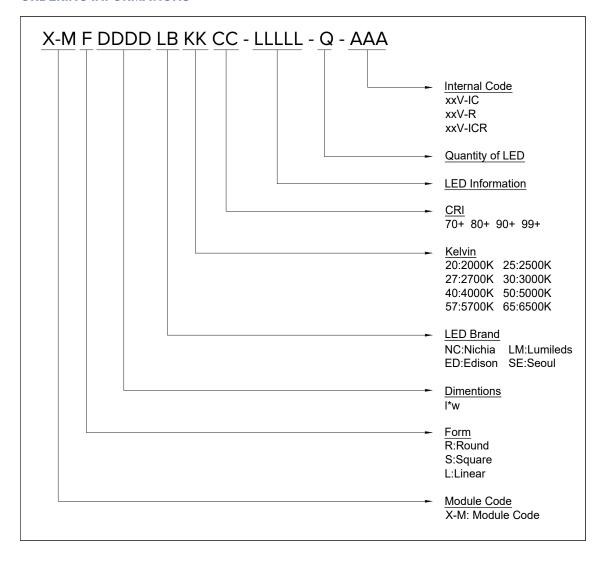


X-ML201000SE4080-IAH0-120

TECHNICAL DATA

Beam Angle	120° -25° ~ +55°C				
Ambient temperature range					
Tc max	85°C				
	Seoul IAH0	Lumileds 2835 2K1	Lumileds 2835 HE		
Max. DC forward current	1500	1500	1500		
Typical voltage of LED Module at max current	96V	96V	83,4V		
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



X-ML201000SE4080-IAH0-120

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DRIVING CURRENT VS LUMEN OUTPUT SPECIFICATION

PCB Material FR4 Electrical Commettion Operating Temperature (°C) -40 ~ +100 Parallel 4 Storage Temperature (°C) -40 ~ +40 Series 30 Thermal Conductivity (W/m-K) 1> LED Quantity 120 LED Seoul IAHU Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ ** Module Operating Voltage (V) 86 89 88 ** Module Operating Current (mA) 240 350 400 ** Branch Operating Current (mA) 60 88 100 ** Module Power (W) 20,66 31,19 35,16 ** Module Light Output (Im) 3,120 4,397 4,606 ** Module Efficiency (Im/W) 151 141 131 **	Comm	on Characteristic	[@Tj : 85°C] ;					
Operating Temperature (°C) -40 ~ +100 Parallel 4 Storage Temperature (°C) -40 ~ +40 Series 30 Thermal Conductivity (W/m-K) 1> LED Quantity 120 LED Seoul IAHO Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80 + Module Operating Voltage (V) 86 89 88 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 20,66 31,19 35,16 Module Light Output (Im) 3.120 4.397 4.606 Module Efficiency (Im/W) 151 141 131 LED Lumileds 2835 2K1 20 Correlated Color Temperature (CCT) 4000K 400 Color Rendering Index (CRI) 89 91 93 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 381 170 4	Module Code	X-ML201000SE40	80-IAH0-120					
Storage Temperature (°C)	PCB Material	FF	R4	Electrical Cor	nection			
Thermal Conductivity (W/m-K) 1> LED Quantity 120	Operating Temperature (°C)	-40 ~	+100	Parallel	4			
Seoul IAHO	Storage Temperature (°C)	-40 -	- +40	Series	30			
Correlated Color Temperature (CCT)	Thermal Conductivity (W/m-K)	1	>	LED Quantity	120			
Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 86 89 88 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 20,66 31,19 35,16 Module Light Output (Im) 3.120 4.397 4.606 Module Efficiency (Im/W) 151 141 131 LED Lumileds 2835 2K1 Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ 4000K Module Operating Voltage (V) 89 91 93 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Efficiency (Im/W) 3.819 5.581 6.473 Module Efficiency (Im/W) 178 176 174 LED Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V)	LED	Seoul IAH0						
Module Operating Voltage (V) 86 89 88 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 20,66 31,19 35,16 Module Light Output (Im) 3.120 4.397 4.606 Module Efficiency (Im/W) 151 141 131 LED Lumileds 2835 2K1 Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 89 91 93 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 240 31,71 37,20 Module Power (W) 21,46 31,71 37,20 Module Eight Output (Im) 3.819 5.581 6.473 Module Efficiency (Im/W) 178 176 174 LED Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Correlated Color Temperature (CCT) 4000K	Correlated Color Temperature (CCT)		4000K					
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Branch Operating Current (mA) 60 88 100 Module Power (W) 20,66 31,19 35,16 Module Light Output (Im) 3.120 4.397 4.606 Module Efficiency (Im/W) 151 141 131 LED Lumileds 2835 2K1 Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 89 91 93 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 21,46 31,71 37,20 Module Light Output (Im) 3.819 5.581 6.473 Module Efficiency (Im/W) 178 176 174 LED Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 <th>Module Operating Voltage (V)</th> <th>86</th> <th>89</th> <th>88</th> <th></th>	Module Operating Voltage (V)	86	89	88				
Module Power (W) 20,66 31,19 35,16 Module Light Output (Im) 3.120 4.397 4.606 Module Efficiency (Im/W) 151 141 131 LED Lumileds 2835 2K1 Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 89 91 93 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 21,46 31,71 37,20 Module Light Output (Im) 3.819 5.581 6.473 Module Efficiency (Im/W) 178 176 174 LED Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Mo	Module Operating Current (mA)	240	350	400				
Module Light Output (Im) 3.120 4.397 4.606 Module Efficiency (Im/W) 151 141 131 Lumileds 2835 2K1 Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 89 91 93 Module Operating Current (mA) 60 88 100 Module Power (W) 21,46 31,71 37,20 Module Light Output (Im) 3.819 5.581 6.473 Module Efficiency (Im/W) 178 176 174 LED Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3,979 5,719 6,48	Branch Operating Current (mA)	60	88	100				
Module Efficiency (Im/W) 151 141 131 LED Lumileds 2835 2K1 Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 89 91 93 Module Operating Current (mA) 60 88 100 Branch Operating Current (mA) 30 81 37,20 Module Power (W) 21,46 31,71 37,20 Module Light Output (Im) 3.819 5.581 6.473 Module Efficiency (Im/W) 178 176 174 LED Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3,979 5,719 6,486	Module Power (W)	20,66	31,19	35,16				
Lumileds 2835 2K1 Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 89 91 93 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 21,46 31,71 37,20 Module Light Output (Im) 3.819 5.581 6.473 Module Efficiency (Im/W) 178 176 174 LED Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3,979 5,719 6,486	Module Light Output (lm)	3.120	4.397	4.606				
Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 89 91 93 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 21,46 31,71 37,20 Module Light Output (Im) 3,819 5,581 6,473 Module Efficiency (Im/W) 178 176 174 LED Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3,979 5,719 6,486	Module Efficiency (lm/W)	151	141	131				
Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 89 91 93 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 21,46 31,71 37,20 Module Light Output (Im) 3.819 5.581 6.473 Module Efficiency (Im/W) 178 176 174 LED Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3,979 5,719 6,486	LED	Lumileds 2835 2K1						
Module Operating Voltage (V) 89 91 93 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 21,46 31,71 37,20 Module Light Output (Im) 3,819 5,581 6,473 Module Efficiency (Im/W) 178 176 174 LED Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3,979 5,719 6,486	Correlated Color Temperature (CCT)	4000K						
Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 21,46 31,71 37,20 Module Light Output (Im) 3,819 5,581 6,473 Module Efficiency (Im/W) 178 176 174 LED Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3,979 5,719 6,486			80+					
Branch Operating Current (mA) 60 88 100 Module Power (W) 21,46 31,71 37,20 Module Light Output (Im) 3.819 5.581 6.473 Module Efficiency (Im/W) 178 176 174 LED Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3,979 5,719 6,486		89	91	93				
Module Power (W) 21,46 31,71 37,20 Module Light Output (Im) 3.819 5.581 6.473 Module Efficiency (Im/W) 178 176 174 Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3,979 5,719 6,486	Module Operating Current (mA)	240	350	400				
Module Light Output (Im) 3.819 5.581 6.473 Module Efficiency (Im/W) 178 176 174 Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3,979 5,719 6,486	Branch Operating Current (mA)	60	88	100				
Module Efficiency (Im/W) 178 176 174 LED Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3,979 5,719 6,486		21,46	31,71	37,20				
Lumileds 2835 HE Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3.979 5.719 6.486	Module Light Output (lm)	3.819	5.581	6.473				
Correlated Color Temperature (CCT) 4000K Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3.979 5.719 6.486		178						
Color Rendering Index (CRI) 80+ Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3.979 5.719 6.486	LED	Lumileds 2835 HE						
Module Operating Voltage (V) 80 81 82 Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3.979 5.719 6.486	Correlated Color Temperature (CCT)		4000K					
Module Operating Current (mA) 240 350 400 Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3.979 5.719 6.486	Color Rendering Index (CRI)		80+					
Branch Operating Current (mA) 60 88 100 Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3.979 5.719 6.486	Module Operating Voltage (V)	80	81	82				
Module Power (W) 19,22 28,46 32,76 Module Light Output (Im) 3,979 5.719 6.486	Module Operating Current (mA)	240	350	400				
Module Light Output (lm) 3.979 5.719 6.486	Branch Operating Current (mA)	60	88	100				
	Module Power (W)	19,22	28,46	32,76				
Module Efficiency (lm/W) 207 201 198	Module Light Output (lm)	3.979	5.719	6.486	6.486			
	Module Efficiency (lm/W)	207	201	198				

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

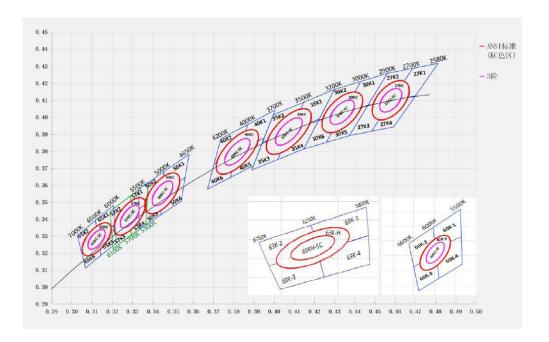
Lumen Output Multiplier							
LED	2700K (CRI 80)	3000K (CRI 80)	4000K (CRI 80)	5000K (CRI 80)	6500K (CRI 80)		
Seoul IAH0	0,93	0,93	1	1	1		
Lumileds 2835 2K1	0,9696	0,985	1	1	1		
Lumileds 2835 HE	0,97	0,961	1	1	1		

Relative luminous intensity versus CCT (K)

4 5 6 Α Α В В \mathbb{C} С Stock code No Revision Date Sheet Drawn By Checked By

X-ML201000SE4080-IAH0-120 MECHANICAL DRAWINGS

CCT AND BINNING INFORMATION



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CONTACT

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