

## SPL703v1840

## TECHNICAL DOCUMENT - LIGHT SOURCE

Supplier's name or trade mark:	MEGAMAN GmbH
Supplier's address	Halskestraße 22-26, AircomParc A140880 RatingenGermany

Model identifier	SPL703v1840
Equivalent Models	N/A

## Technical Document

Useful luminous flux	4500
On-mode Power (P <sub>on</sub> )	32.4 W
Beam angle in degrees for directional light sources (DLS)	N/A
Peak luminous intensity in cd for directional light sources (DLS)	N/A
Correlated Colour Temperature	4000 K
Chromaticity coordinates (x,y)	0.382, 0.38
Colour Rendering Index (CRI)	Ra 80
Standby Power (P <sub>sb</sub> )	N/A
Networked Standby Power (P <sub>net</sub> )	N/A
R9 colour rendering index value for LED and OLED light sources	0
Survival factor for LED and OLED light sources	0.90
Lumen maintenance factor for LED and OLED light sources	0.974
Indicative lifetime L70B50 for LED and OLED light sources	50000
Displacement Factor (cos φ1)	0.9
Colour Consistency	SDCM ≤ 4
Luminance for HLLS	N/A
Flicker metric (PstLM)	1
Stroboscopic effect metric (SVM)	0.4
Excitation purity for CTLS	N/A
Weighted Energy Consumption	33 kWh/1000hrs
Energy Efficiency Class	E
Outer dimensions in mm	
Height	2
Width	12
Depth	568
Standards Compliance	CE, RoHS

## CALCULATIONS - GENERAL RULE

Refer to Annex II of Energy Labelling (EU) 2019/2015

## Energy efficiency classes and calculation method

The energy efficiency class of light sources shall be determined as set out in Table 1, on the basis of the total mains efficacy  $\eta_{TM}$ , which is calculated by dividing the declared useful luminous flux  $\Phi_{use}$  (expressed in *lm*) by the declared on-mode power consumption  $P_{on}$  (expressed in *W*) and multiplying by the applicable factor FTM of Table 2, as follows:

$$\eta_{TM} = (\Phi_{use}/P_{on}) \times FTM \text{ (lm/W)}$$

Table 1

## Energy efficiency classes of light sources

Energy efficiency class	Total mains efficacy $\eta_{TM}$ (lm/W)
A	$210 \leq \eta_{TM}$
B	$185 \leq \eta_{TM} < 210$
C	$160 \leq \eta_{TM} < 185$
D	$135 \leq \eta_{TM} < 160$
E	$110 \leq \eta_{TM} < 135$
F	$85 \leq \eta_{TM} < 110$
G	$\eta_{TM} < 85$

Table 2

## Factors FTM by light source type

Light source type	Factor FTM
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Non-directional (NDLS) operating on mains (MLS)	1,000
Non-directional (NDLS) not operating on mains (NMLS)	0,926
Directional (DLS) operating on mains (MLS)	1,176
Directional (DLS) not operating on mains (NMLS)	1,089

#### ADDITIONAL PART

A list of compatible dimmers shall be provided on the website [www.megaman.cc](http://www.megaman.cc)

MEGAMAN | WEEE - Green Room | LED, Energy-efficient & Eco-friendly Lighting, Restriction of Hazardous Substances

<https://www.megaman.cc/resources/green-room/weee>

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