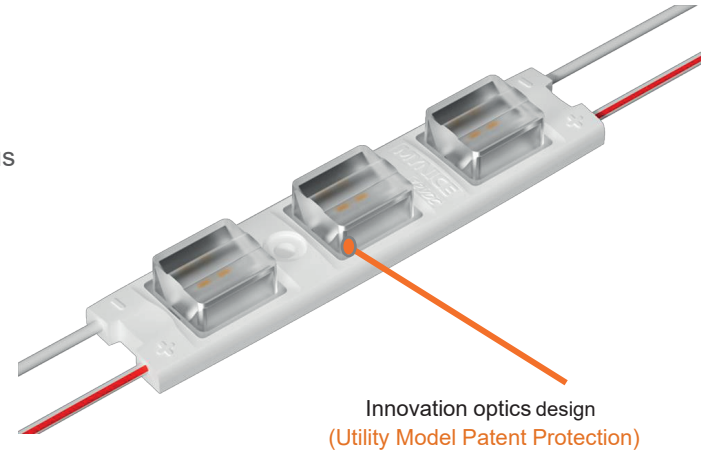
SPECIFICATION

24 V | 2.4 W | 15° | 110 lm/W | 7000 °K | IP66 | RoHS | CE | E 486188 | LM-79 TESTED | LM-80 TESTED | OSRAM

LED MODULE TS2415

New innovation optics lens design can get excellent homogeneous requirement (mynice Invention patent).
- 5 years warranty.
- 24VDC:130 lm/W;12VDC:110 lm/W.
- 2.4 W/module.

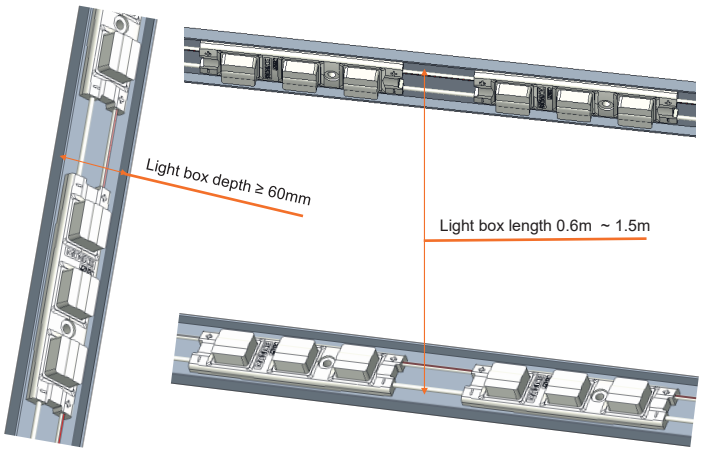


Innovation optics design
(Utility Model Patent Protection)

Electrical and Photometrical data

ELECTRICAL DATA	LED MODULE
PART NUMBERS	TS2415
Typical Voltage	24V DC
Energy Cons. (W/module)	2.4W
Light color (designation)	Cold white
Color (CCT, wavelength)	7000K
Typical Brightness (lumen/module)	312

Application

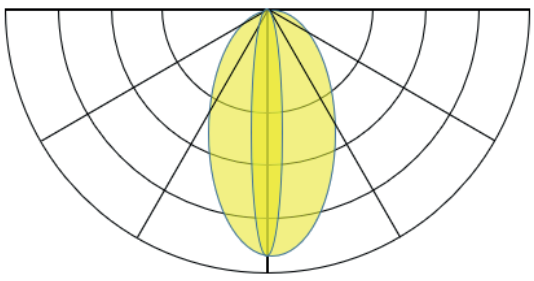


Remark:
1. Ranking at ta= 25 .
2. Constant current design.
3. Tolerance of measurements for power/lumen are ±10%.

Application Conditions and light distribution

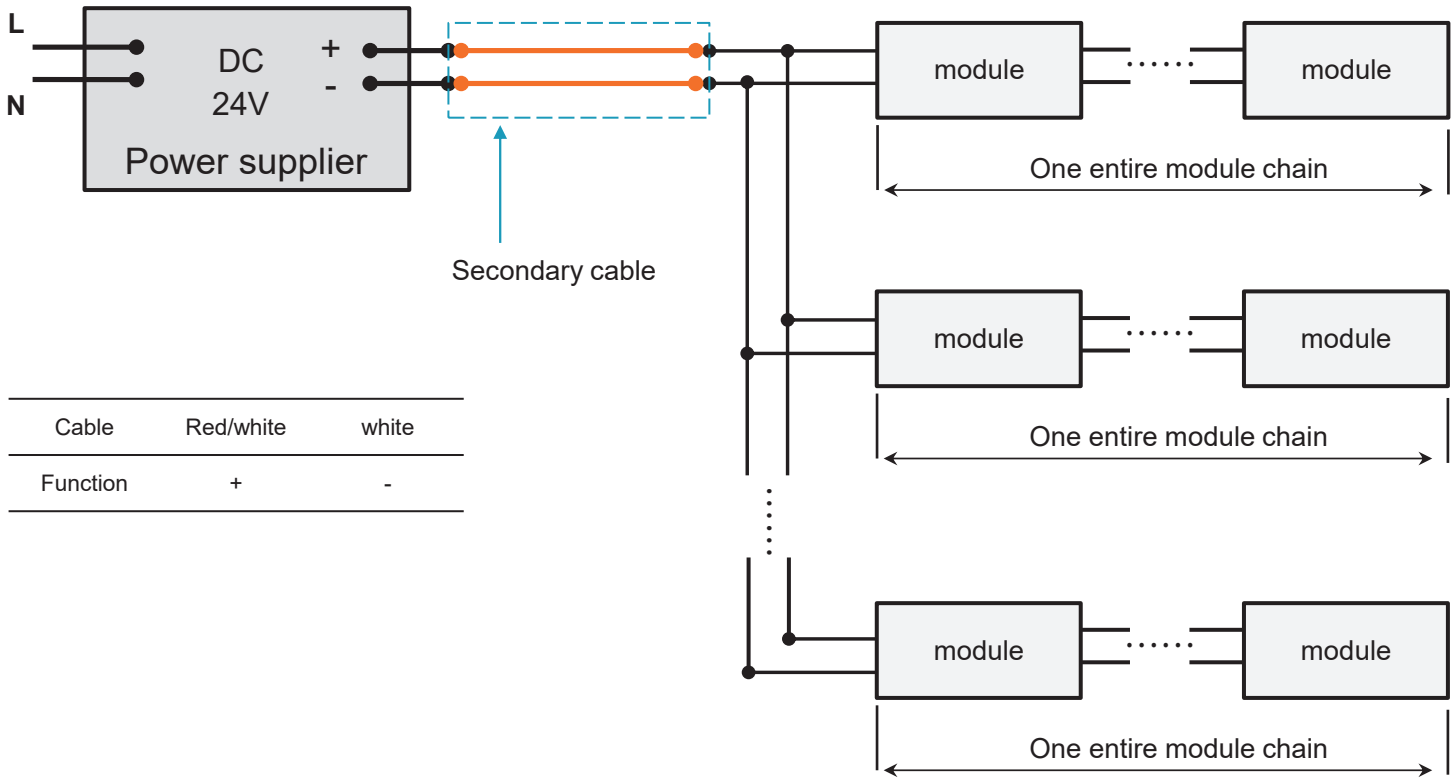
Operating Environment (t_a)	-25°C to +55°C
Storage Temperature Range (t_s)	-40°C to +85°C
IP Rating	IP66
Lifetime (L70B50)	5 years
tc temperature	80°C
Dimming mode	Dimmable
Cutting Resolution	Cut on wire between every module

Beam Angle



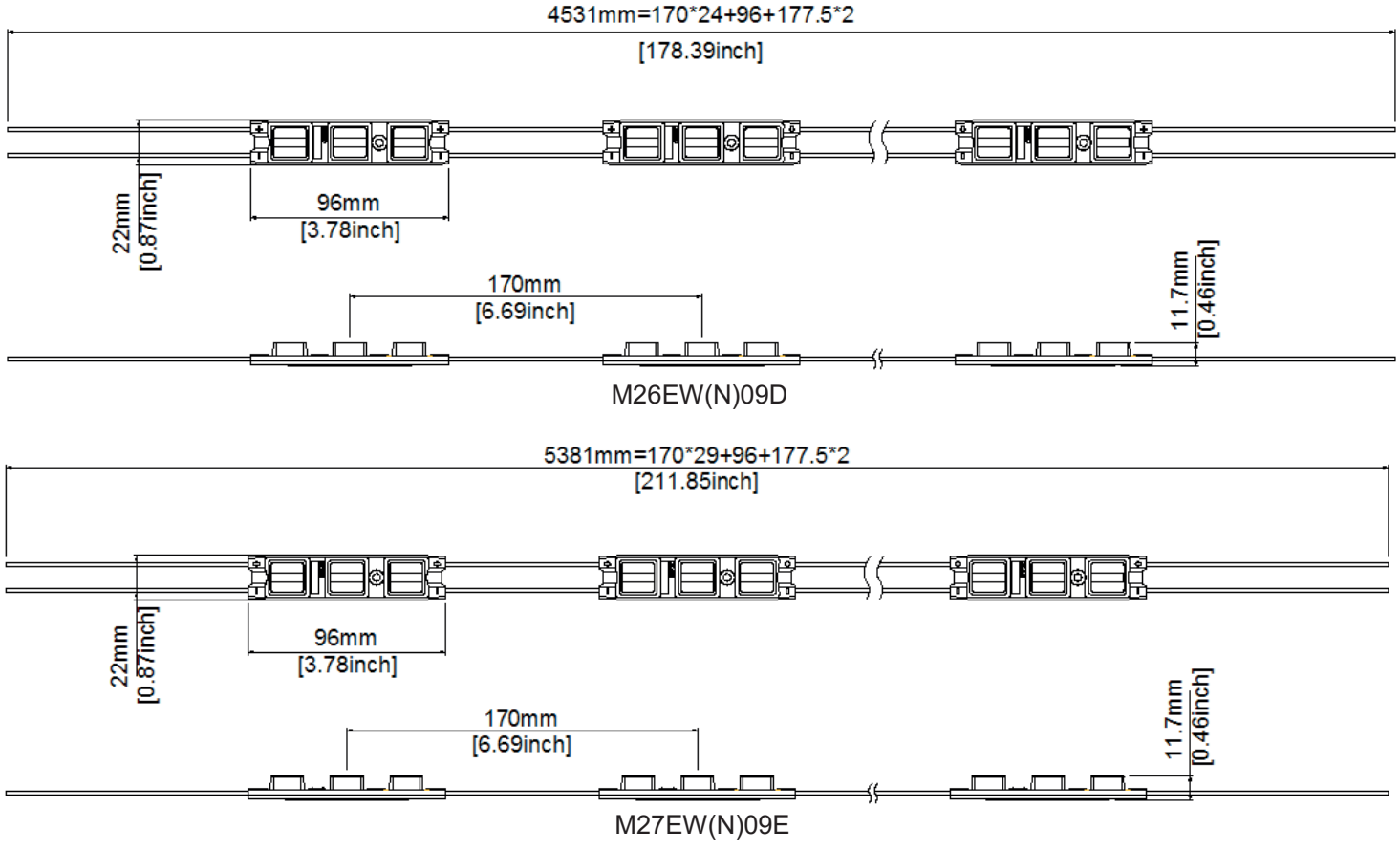
Beam angle: 15° x 85°

Wiring method

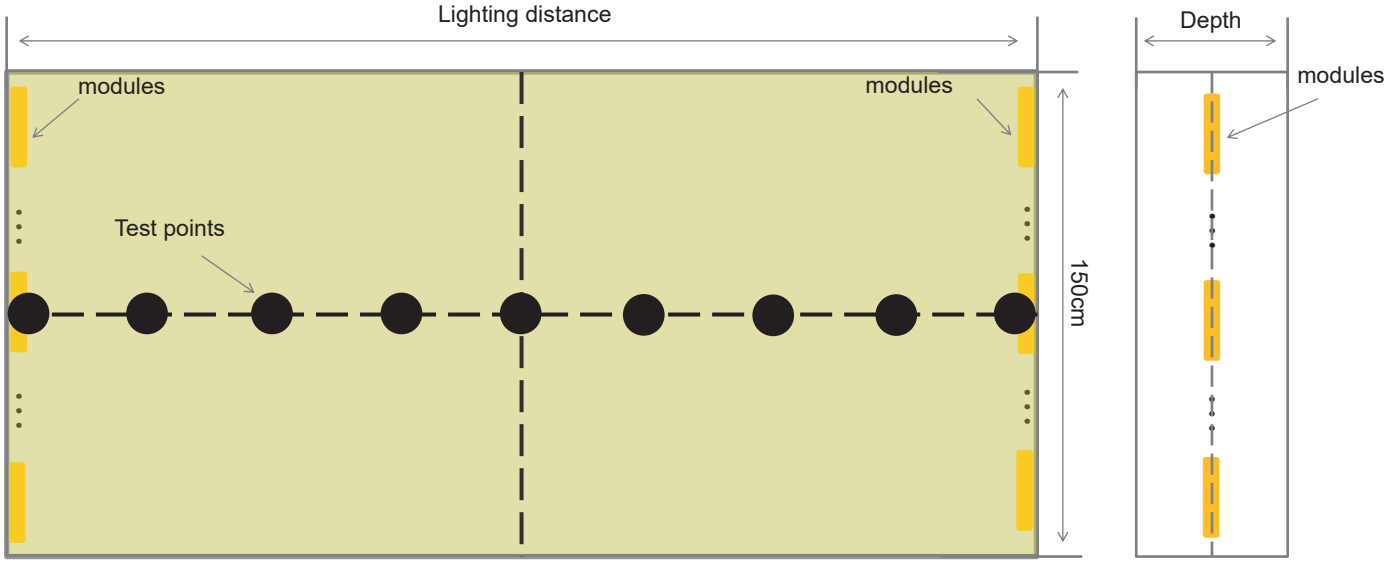


Cable	Red/white	white
Function	+	-

Drawing



Test Setup



Lighting box information:

Single side light box, back board reflection rate ~70%.

Transparent material: **Barrisol 04011 film**, light transmission rate ~46%, reflection rate ~ 56%.

Lighting distance/cm	Depth/cm																			
	6				8				10				12				15			
	Illu. lx	Lum. nit	Min./ Ave.	Min./ Max.	Illu. lx	Lum. nit	Min./ Ave.	Min./ Max.	Illu. lx	Lum. nit	Min./ Ave.	Min./ Max.	Illu. lx	Lum. nit	Min./ Ave.	Min./ Max.	Illu. lx	Lum. nit	Min./ Ave.	Min./ Max.
60	3840	1152	90.2%	79.3%	3489	1047	90.7%	81.2%	3171	951	91.7%	82.8%	2919	876	91.8%	86.0%	2622	786	93.3%	86.3%
80	3071	921	86.1%	68.8%	2810	843	89.5%	74.1%	2586	776	90.0%	77.4%	2401	720	89.3%	78.0%	2172	652	92.2%	83.5%
100	2544	763	78.5%	58.1%	2570	771	89.2%	71.7%	2204	661	88.2%	71.3%	2049	615	87.6%	72.5%	1872	562	89.7%	76.0%
120	2485	745	64.8%	44.8%	2053	616	83.3%	63.2%	1941	582	84.7%	66.4%	1809	543	86.6%	68.8%	1688	506	85.7%	68.8%
150	\				1591	477	78.1%	60.3%	1519	456	82.7%	67.1%	1452	436	84.0%	68.8%	1435	431	83.7%	62.0%
180	\				1386	416	66.8%	45.0%	1329	399	75.6%	53.8%	1282	385	79.7%	58.3%	1213	364	83.4%	63.3%
200	\				\				1275	383	67.1%	40.2%	1210	363	70.9%	44.3%	1137	341	78.2%	52.2%
250	\				\				\				992	298	62.8%	39.4%	941	282	71.4%	46.7%
300	\				\				\				\				815	245	62.9%	37.5%

\ Not recommended to use.

Lighting distance/cm	Depth/cm																			
	6				8				10				12				15			
	Illu. lx	Lum. nit	Min./ Ave.	Min./ Max.	Illu. lx	Lum. nit	Min./ Ave.	Min./ Max.	Illu. lx	Lum. nit	Min./ Ave.	Min./ Max.	Illu. lx	Lum. nit	Min./ Ave.	Min./ Max.	Illu. lx	Lum. nit	Min./ Ave.	Min./ Max.
60	4517	1355	91.7%	80.6%	4104	1231	92.3%	82.6%	3730	1119	93.2%	84.2%	3434	1030	93.4%	87.5%	3084	925	94.8%	87.8%
80	3613	1084	87.6%	69.9%	3305	992	91.0%	75.3%	3042	913	91.5%	78.7%	2824	847	90.8%	79.3%	2555	767	93.8%	84.9%
100	2993	898	79.9%	59.1%	3024	907	90.7%	73.0%	2592	778	89.7%	72.5%	2410	723	89.1%	73.8%	2202	661	91.2%	77.3%
120	2923	877	65.9%	45.6%	2415	725	84.7%	64.2%	2283	685	86.2%	67.5%	2128	638	88.1%	70.0%	1986	596	87.1%	69.9%
150	\				1872	562	79.4%	61.3%	1787	536	84.1%	68.3%	1709	513	85.5%	69.9%	1689	507	85.1%	63.0%
180	\				1630	489	67.9%	45.8%	1563	469	76.8%	54.7%	1508	452	81.1%	59.3%	1428	428	84.8%	64.3%
200	\				\				1500	450	68.3%	40.9%	1424	427	72.1%	45.1%	1337	401	79.5%	53.1%
250	\				\				\				1167	350	63.8%	40.0%	1107	332	72.6%	47.5%
300	\				\				\				\				959	288	64.0%	38.1%

\ Not recommended to use.

Package and additional information

Depth: 6cm
Lighting distance: 100cm.

Depth: 6cm,
Lighting distance: 120cm.

The photograph is for reference only!

Package and additional information

Installation of LED modules (with power supplies) needs to be made under consideration of all valid regulations and norms.
Installation by qualified electrician only.
Parallel connection is mandatory for safe electrical operation. Serial connection of LED modules is discouraged. Unbalanced voltage drop in serial connection can cause hazardous overload
Electrical contact is achieved with the contact cables or the terminals of the module. Please refer to the technical data for maximum number of LED modules that can be operated on one control gear.
To avoid mechanical damage, the LED modules have to be attached securely to the intended mounting surface. It is recommended to avoid heavy vibration.
LED modules are dimmable by means of PWM (pulse width modulation).