



Tulip M

TRACK SPOTLIGHTS | NON-DALI SERIES

A highly elegant, compact track spotlight. The radiator is encased in the aluminum housing, allowing for a smooth design. As all our track lights, the Tulip M range includes several special color temperatures for food and art. Especially suitable for commercial spaces and showrooms that require a sleek, minimalistic luminaire.

The modern touch is given by the aluminum housing and two color options: signal white and jet black.

Available in two series, with different add-ons and controls:

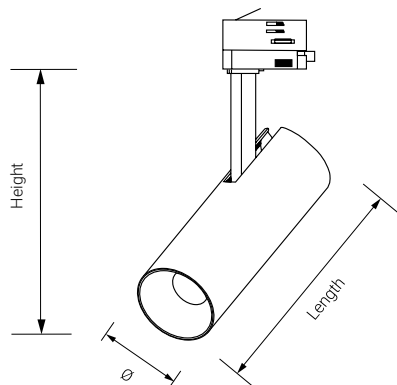
- Tulip M Non-DALI – the standard for any project in the retail sector
- Tulip M DALI – with DALI controls for illumination adjustments

APPLICATION

High End Grocery & Supermarkets | Fashion Retailers | Hospitality | Art & Exhibitions

FEATURES & BENEFITS

- CRI > 80 as standard, up to 98 for certain special colors
- 10 color temperatures, including special color temperatures for different applications such as food, and art.
- Great variety of optics – 3 angles
- Efficiency: 109 lm/W @4000K
- Very long service life: 50.000 h at 90% luminous flux
- Dimmable (only for DALI Series)



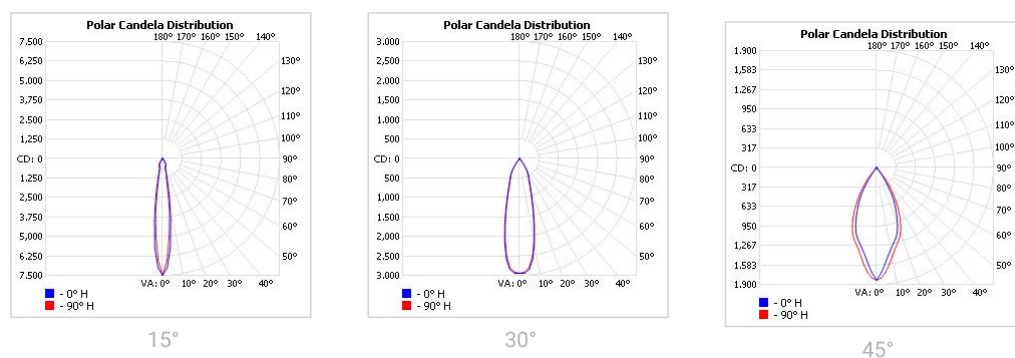
SPECIFICATIONS

Power consumption	14W, 20W, 27W
Dimensions	Ø95x240x279mm±1mm
Weight	1.4 Kg
Housing materials	Aluminium, glass
IK code	IK02
THD (at 230V, 50Hz, Full load)	< 8%
Protection class	Safety class 1
Operating temperature [°C]	-20°C ... +45°C / -4F ... +113F
Operating humidity [%]	10 ÷ 85
Power factor	≥0.95
AC Input [Vac]	220 - 240 VAC
Lens angle [°]	15°, 30°, 45°
Lifespan [h]	50.000
Housing color	○ RAL 9003 - Signal white, ● RAL 9005 - Jet Black
Lumen maintenance	L90/B10@50.000h at 25°C
IP factor	IP20
Control optional	-
Warranty [years]	5
Storage temperature range [°C]	-20°C ... +55°C / -4F ... +131F
Emergency option	-

#	Standard	ART	Food
CRI	CRI80	CRI98	CRI80
CCT [K]	2700 / 3000 / 3500 / 4000	3000	BVF / FBS / FZM / FSM / FSH
MacAdam	3	2	3 / 4 / 4 / 3 / 3

CRI - Color rendering, CCT - Color temperature, MacAdam - Color consistency

LIGHT DISTRIBUTION



TOLERANCES

Luminous flux tolerances: -/+ 5%

Consumption tolerance: -/+ 5% for Non-DALI | -/+ 10% for Non-DALI & KIT EM | -/+ 10% for DALI | -/+ 15% for DALI & KIT EM

BATTERY WARRANTY

Non-DALI EM & DALI EM: 12 months warranty

Non-DALI & DALI: -

MAXIMUM NO. OF LUMINAIRES ON A CIRCUIT

Luminaire Power(W)	Control type	Circuit Breaker Type					
		B			C		
		20	16	10	20	16	10
14-20W	Non-DALI	62	50	31	104	85	52
27W	Non-DALI	62	50	31	104	85	52
14W	DALI	44	35	21	73	58	35
20W-27W	DALI	94	95	47	94	95	47

RISK GROUP

Standard (CRI80)	RG1
FOOD (BVF, FBS, FSM)	RG1
FOOD ≤35W (FZM, FSH)	RG1
FOOD >35W (FZM, FSH)	RG2
FAS	RG1
AMB2200	RG1
ART	RG1
AGI	RG1
CRI90	RG1
CRI95	RG1
ENT	RG1

RG1

The evaluation of photobiological safety is carried out according to the standard IEC 62471:2008 ("Photobiological safety of lamps and lamp systems"). Following the definition of the risk grouping system of the mentioned IEC standard, the LEDs mounted on this family fall into the class "Low Risk (RG1 – No photobiological hazard under normal behavioral limitations)". Under real circumstances (regarding exposure time, pupils, observation distance), it is assumed that there is no endangerment to the eye from these devices. As a matter of principle, however, it should be mentioned that intense light sources have a high secondary exposure potential due to their blinding effect.

RG2

The evaluation of photobiological safety is carried out according to the standard IEC 62471:2008 ("Photobiological safety of lamps and lamp systems"). Following the definition of the risk grouping system of the mentioned IEC standard, the LEDs mounted on this family fall into the class "Moderate Risk (RG2)". Under real circumstances (regarding exposure time, pupils, observation distance), it is assumed that there is no endangerment to the eye from these devices. As a matter of principle, however, it should be mentioned that intense light sources have a high secondary exposure potential due to their blinding effect.

SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
CRI 80						
164432 TulipM S34016R/2700/14W/80/A15	Ø95x240x279mm±1mm	2700	1440	14W	103	15°
164433 TulipM S34016R/3000/14W/80/A15	Ø95x240x279mm±1mm	3000	1455	14W	104	15°
164434 TulipM S34016R/3500/14W/80/A15	Ø95x240x279mm±1mm	3500	1495	14W	107	15°
164435 TulipM S34016R/4000/14W/80/A15	Ø95x240x279mm±1mm	4000	1525	14W	109	15°
164436 TulipM S34016R/2700/14W/80/A30	Ø95x240x279mm±1mm	2700	1440	14W	103	30°
164437 TulipM S34016R/3000/14W/80/A30	Ø95x240x279mm±1mm	3000	1455	14W	104	30°
164438 TulipM S34016R/3500/14W/80/A30	Ø95x240x279mm±1mm	3500	1495	14W	107	30°
164439 TulipM S34016R/4000/14W/80/A30	Ø95x240x279mm±1mm	4000	1525	14W	109	30°
164440 TulipM S34016R/2700/14W/80/A45	Ø95x240x279mm±1mm	2700	1440	14W	103	45°
164441 TulipM S34016R/3000/14W/80/A45	Ø95x240x279mm±1mm	3000	1455	14W	104	45°
164442 TulipM S34016R/3500/14W/80/A45	Ø95x240x279mm±1mm	3500	1495	14W	107	45°
164443 TulipM S34016R/4000/14W/80/A45	Ø95x240x279mm±1mm	4000	1525	14W	109	45°
164444 TulipM S34016R/2700/20W/80/A15	Ø95x240x279mm±1mm	2700	2010	20W	101	15°
164445 TulipM S34016R/3000/20W/80/A15	Ø95x240x279mm±1mm	3000	2025	20W	102	15°
164446 TulipM S34016R/3500/20W/80/A15	Ø95x240x279mm±1mm	3500	2080	20W	104	15°
164447 TulipM S34016R/4000/20W/80/A15	Ø95x240x279mm±1mm	4000	2120	20W	106	15°
164448 TulipM S34016R/2700/20W/80/A30	Ø95x240x279mm±1mm	2700	2010	20W	101	30°
164449 TulipM S34016R/3000/20W/80/A30	Ø95x240x279mm±1mm	3000	2025	20W	102	30°
164450 TulipM S34016R/3500/20W/80/A30	Ø95x240x279mm±1mm	3500	2080	20W	104	30°
164451 TulipM S34016R/4000/20W/80/A30	Ø95x240x279mm±1mm	4000	2120	20W	106	30°
164452 TulipM S34016R/2700/20W/80/A45	Ø95x240x279mm±1mm	2700	2010	20W	101	45°
164453 TulipM S34016R/3000/20W/80/A45	Ø95x240x279mm±1mm	3000	2025	20W	102	45°
164454 TulipM S34016R/3500/20W/80/A45	Ø95x240x279mm±1mm	3500	2080	20W	104	45°
164455 TulipM S34016R/4000/20W/80/A45	Ø95x240x279mm±1mm	4000	2120	20W	106	45°
164456 TulipM S34016R/2700/27W/80/A15	Ø95x240x279mm±1mm	2700	2605	27W	97	15°
164457 TulipM S34016R/3000/27W/80/A15	Ø95x240x279mm±1mm	3000	2630	27W	98	15°
164458 TulipM S34016R/3500/27W/80/A15	Ø95x240x279mm±1mm	3500	2700	27W	100	15°
164459 TulipM S34016R/4000/27W/80/A15	Ø95x240x279mm±1mm	4000	2755	27W	103	15°
164460 TulipM S34016R/2700/27W/80/A30	Ø95x240x279mm±1mm	2700	2605	27W	97	30°
164461 TulipM S34016R/3000/27W/80/A30	Ø95x240x279mm±1mm	3000	2630	27W	98	30°
164462 TulipM S34016R/3500/27W/80/A30	Ø95x240x279mm±1mm	3500	2700	27W	100	30°
164463 TulipM S34016R/4000/27W/80/A30	Ø95x240x279mm±1mm	4000	2755	27W	103	30°
164464 TulipM S34016R/2700/27W/80/A45	Ø95x240x279mm±1mm	2700	2605	27W	97	45°
164465 TulipM S34016R/3000/27W/80/A45	Ø95x240x279mm±1mm	3000	2630	27W	98	45°
164466 TulipM S34016R/3500/27W/80/A45	Ø95x240x279mm±1mm	3500	2700	27W	100	45°
164467 TulipM S34016R/4000/27W/80/A45	Ø95x240x279mm±1mm	4000	2755	27W	103	45°
164614 TulipM S34016R/BVF/14W/80/A15	Ø95x240x279mm±1mm	BVF	1225	14W	88	15°
164615 TulipM S34016R/FBS/14W/80/A15	Ø95x240x279mm±1mm	FBS	830	14W	60	15°
164616 TulipM S34016R/FZM/14W/80/A15	Ø95x240x279mm±1mm	FZM	800	14W	58	15°
164617 TulipM S34016R/FSM/14W/80/A15	Ø95x240x279mm±1mm	FSM	830	14W	60	15°
164618 TulipM S34016R/FSH/14W/80/A15	Ø95x240x279mm±1mm	FSH	1180	14W	85	15°
164619 TulipM S34016R/BVF/14W/80/A30	Ø95x240x279mm±1mm	BVF	1225	14W	88	30°
164620 TulipM S34016R/FBS/14W/80/A30	Ø95x240x279mm±1mm	FBS	830	14W	60	30°
164621 TulipM S34016R/FZM/14W/80/A30	Ø95x240x279mm±1mm	FZM	800	14W	58	30°
164622 TulipM S34016R/FSM/14W/80/A30	Ø95x240x279mm±1mm	FSM	830	14W	60	30°
164623 TulipM S34016R/FSH/14W/80/A30	Ø95x240x279mm±1mm	FSH	1180	14W	85	30°
164624 TulipM S34016R/BVF/14W/80/A45	Ø95x240x279mm±1mm	BVF	1225	14W	88	45°
164625 TulipM S34016R/FBS/14W/80/A45	Ø95x240x279mm±1mm	FBS	830	14W	60	45°
164626 TulipM S34016R/FZM/14W/80/A45	Ø95x240x279mm±1mm	FZM	800	14W	58	45°
164627 TulipM S34016R/FSM/14W/80/A45	Ø95x240x279mm±1mm	FSM	830	14W	60	45°

SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
CRI 80						
164628 TulipM S34016R/FSH/14W/80/A45	Ø95x240x279mm±1mm	FSH	1180	14W	85	45°
164629 TulipM S34016R/BVF/20W/80/A15	Ø95x240x279mm±1mm	BVF	1675	20W	84	15°
164630 TulipM S34016R/FBS/20W/80/A15	Ø95x240x279mm±1mm	FBS	1155	20W	58	15°
164631 TulipM S34016R/FZM/20W/80/A15	Ø95x240x279mm±1mm	FZM	1105	20W	56	15°
164632 TulipM S34016R/FSM/20W/80/A15	Ø95x240x279mm±1mm	FSM	1130	20W	57	15°
164633 TulipM S34016R/FSH/20W/80/A15	Ø95x240x279mm±1mm	FSH	1640	20W	82	15°
164634 TulipM S34016R/BVF/20W/80/A30	Ø95x240x279mm±1mm	BVF	1675	20W	84	30°
164635 TulipM S34016R/FBS/20W/80/A30	Ø95x240x279mm±1mm	FBS	1155	20W	58	30°
164636 TulipM S34016R/FZM/20W/80/A30	Ø95x240x279mm±1mm	FZM	1105	20W	56	30°
164637 TulipM S34016R/FSM/20W/80/A30	Ø95x240x279mm±1mm	FSM	1130	20W	57	30°
164638 TulipM S34016R/FSH/20W/80/A30	Ø95x240x279mm±1mm	FSH	1640	20W	82	30°
164639 TulipM S34016R/BVF/20W/80/A45	Ø95x240x279mm±1mm	BVF	1675	20W	84	45°
164640 TulipM S34016R/FBS/20W/80/A45	Ø95x240x279mm±1mm	FBS	1155	20W	58	45°
164641 TulipM S34016R/FZM/20W/80/A45	Ø95x240x279mm±1mm	FZM	1105	20W	56	45°
164642 TulipM S34016R/FSM/20W/80/A45	Ø95x240x279mm±1mm	FSM	1130	20W	57	45°
164643 TulipM S34016R/FSH/20W/80/A45	Ø95x240x279mm±1mm	FSH	1640	20W	82	45°
164644 TulipM S34016R/BVF/27W/80/A15	Ø95x240x279mm±1mm	BVF	2220	27W	83	15°
164645 TulipM S34016R/FBS/27W/80/A15	Ø95x240x279mm±1mm	FBS	1515	27W	57	15°
164646 TulipM S34016R/FZM/27W/80/A15	Ø95x240x279mm±1mm	FZM	1455	27W	54	15°
164647 TulipM S34016R/FSM/27W/80/A15	Ø95x240x279mm±1mm	FSM	1480	27W	55	15°
164648 TulipM S34016R/FSH/27W/80/A15	Ø95x240x279mm±1mm	FSH	2170	27W	81	15°
164649 TulipM S34016R/BVF/27W/80/A30	Ø95x240x279mm±1mm	BVF	2220	27W	83	30°
164650 TulipM S34016R/FBS/27W/80/A30	Ø95x240x279mm±1mm	FBS	1515	27W	57	30°
164651 TulipM S34016R/FZM/27W/80/A30	Ø95x240x279mm±1mm	FZM	1455	27W	54	30°
164652 TulipM S34016R/FSM/27W/80/A30	Ø95x240x279mm±1mm	FSM	1480	27W	55	30°
164653 TulipM S34016R/FSH/27W/80/A30	Ø95x240x279mm±1mm	FSH	2170	27W	81	30°
164654 TulipM S34016R/BVF/27W/80/A45	Ø95x240x279mm±1mm	BVF	2220	27W	83	45°
164655 TulipM S34016R/FBS/27W/80/A45	Ø95x240x279mm±1mm	FBS	1515	27W	57	45°
164656 TulipM S34016R/FZM/27W/80/A45	Ø95x240x279mm±1mm	FZM	1455	27W	54	45°
164657 TulipM S34016R/FSM/27W/80/A45	Ø95x240x279mm±1mm	FSM	1480	27W	55	45°
164658 TulipM S34016R/FSH/27W/80/A45	Ø95x240x279mm±1mm	FSH	2170	27W	81	45°
CRI 98						
164533 TulipM S34016R/ART3000/14W/98/A15	Ø95x240x279mm±1mm	ART3000	1160	14W	83	15°
164535 TulipM S34016R/ART3000/14W/98/A30	Ø95x240x279mm±1mm	ART3000	1160	14W	83	30°
164537 TulipM S34016R/ART3000/14W/98/A45	Ø95x240x279mm±1mm	ART3000	1160	14W	83	45°
164539 TulipM S34016R/ART3000/20W/98/A15	Ø95x240x279mm±1mm	ART3000	1600	20W	80	15°
164541 TulipM S34016R/ART3000/20W/98/A30	Ø95x240x279mm±1mm	ART3000	1600	20W	80	30°
164543 TulipM S34016R/ART3000/20W/98/A45	Ø95x240x279mm±1mm	ART3000	1600	20W	80	45°
164545 TulipM S34016R/ART3000/27W/98/A15	Ø95x240x279mm±1mm	ART3000	2095	27W	78	15°
164547 TulipM S34016R/ART3000/27W/98/A30	Ø95x240x279mm±1mm	ART3000	2095	27W	78	30°
164549 TulipM S34016R/ART3000/27W/98/A45	Ø95x240x279mm±1mm	ART3000	2095	27W	78	45°