

ROADWAY (MRL01)



DESCRIPTION

The Mester LED roadway luminaire provides uncompromising optical performance and outstanding versatility for a wide variety of area and roadway applications. Our customer focused features include single latch tool-less entry, industry leading surge protection options and superior lumen maintenance and performance, all in an economical design. It is ideal for illuminating walkways, parking lots and roadways.



SPECIFICATION FEATURES

Construction

- Heavy-duty cast aluminum housing and removable door 3G vibration rated to ensure strength of construction and longevity in application.
- Housing is completely sealed against moisture and environmental contaminants.

Optics

- Available in IES Type II, III distributions.
- Offered Standard in 3000K, 3500K, 4000K and 5000K (+/- 275K) CCT and minimum 70 CRI.
- Scalable Lumen Packages from 6,100 to 20,000 Lumens replaces up to 400W Metal Halide.
- Optics is precisely designed to shape the distribution, maximizing efficiency and application spacing.

Electrical

- Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation.
- Standard 1-10V dimming and 10kV/10kA common- and differential- mode surge protection available.
- Greater than 0.9 power factor, less than 20% harmonic distortion, and is suitable for operation in -40°C to 45°C ambient environments.
- LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life.

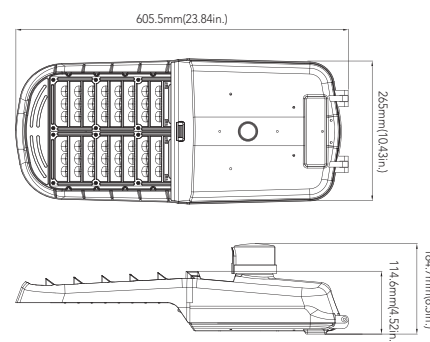
Lifespan

- Estimated 100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

Warranty

- Five-year warranty.

DIMENSIONS

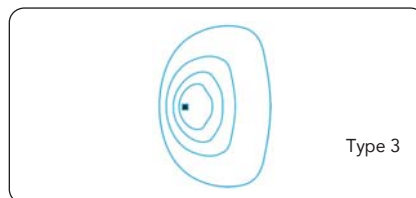
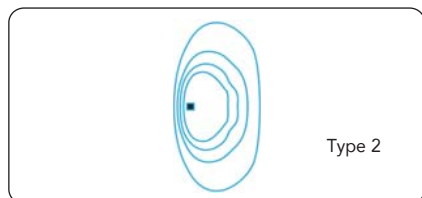


Net Weight:
 45W: 8.353lb 100W: 9.46lb
 70W: 8.664lb 150W: 10.018lb

PHOTOMETRICS

Type 2 optics creates an asymmetric distribution working well in walkway and roadway applications where more light is required "street side" than "house side".

Type 3 optics produces an asymmetrical pattern that directs the majority of the light forward and equally on both sides of the luminaire. In a back-to-back configuration, it creates a rectangular pattern which can extend pole spacings.



PERFORMANCE DATA

SYSTEM WATTS	VOLTAGE	DIST. TYPE	CRI	LUMENS (3000K)	LPW (3000K)	LUMENS (3500K)	LPW (3500K)	LUMENS (4000K)	LPW (4000K)	LUMENS (5000K)	LPW (5000K)	EPA
45W	120-277V/347-480V	3	70	6100lm	136 lm/W	6200lm	138 lm/W	6300lm	140 lm/W	6350lm	141 lm/W	0.4711
45W	120-277V/347-480V	2	70	6100lm	136 lm/W	6200lm	138 lm/W	6300lm	140 lm/W	6350lm	141 lm/W	0.4711
70W	120-277V/347-480V	3	70	9200lm	131 lm/W	9200lm	131 lm/W	9300lm	133 lm/W	9400lm	134 lm/W	0.4711
70W	120-277V/347-480V	2	70	9200lm	131 lm/W	9200lm	131 lm/W	9300lm	133 lm/W	9400lm	134 lm/W	0.4711
100W	120-277V/347-480V	3	70	13000lm	130 lm/W	13200lm	132 lm/W	13600lm	136 lm/W	13800lm	138 lm/W	0.4711
100W	120-277V/347-480V	2	70	13000lm	130 lm/W	13200lm	132 lm/W	13600lm	136 lm/W	13800lm	138 lm/W	0.4711
150W	120-277V/347-480V	3	70	19500lm	130 lm/W	19600lm	131 lm/W	19800lm	132 lm/W	20000lm	133 lm/W	0.4711
150W	120-277V/347-480V	2	70	19500lm	130 lm/W	19600lm	131 lm/W	19800lm	132 lm/W	20000lm	133 lm/W	0.4711

ORDERING GUIDE

Example: MRL01 45W 27V XXX YYYYY

Fixture Type	Wattage	Voltage	CCT	Finish	Photocell (Option)	Motion Sensor (Option)	Photometry	Internal Code
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
MRL01	45 45W 70 70W 100 100W 150 150W	27V 120-277V 48V 347-480V	30K 3000K 35K 3500K 40K 4000K 50K 5000K	SG Silver Gray D Dark Bronze B Black W White	P0 120-277V Photocell P3 347V Photocell P4 480V Photocell Blank Without Photocell	M With Sensor Blank Without Sensor	T2 TYPE II Photometry T3 TYPE III Photometry	Blank Alphanumeric

ELECTRICAL DATA

Number Of Drivers	Driver Current (mA)	Nominal Power (W)	INPUT VOLTAGE (V)	CURRENT (Amps)
1	1120	45	120	0.38
		45	208	0.22
		45	240	0.19
		45	277	0.16
1	1200	45	347	0.13
		45	480	0.09
1	1750	70	120	0.58
		70	208	0.34
		70	240	0.29
		70	277	0.25
1	1850	70	347	0.20
		70	480	0.15
1	2600	100	120	0.83
		100	208	0.48
		100	240	0.42
		100	277	0.36
		100	347	0.29
		100	480	0.21
1	5600	150	120	1.25
		150	208	0.72
		150	240	0.63
		150	277	0.54
		150	347	0.43
		150	480	0.31

DLC Model NO.

SYSTEM WATTS	VOLTAGE	CCT	DLC NO.	DLC Classification
45W	120-277V	3000K	MRL0145W27V30K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		3500K	MRL0145W27V35K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		4000K	MRL0145W27V40K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		5000K	MRL0145W27V50K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
45W	347-480V	3000K	MRL0145W48V30K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		3500K	MRL0145W48V35K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		4000K	MRL0145W48V40K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		5000K	MRL0145W48V50K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
70W	120-277V	3000K	MRL0170W27V30K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		3500K	MRL0170W27V35K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		4000K	MRL0170W27V40K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		5000K	MRL0170W27V50K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
70W	347-480V	3000K	MRL0170W48V30K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		3500K	MRL0170W48V35K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		4000K	MRL0170W48V40K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		5000K	MRL0170W48V50K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
100W	120-277V	3000K	MRL01100W27V30K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		3500K	MRL01100W27V35K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		4000K	MRL01100W27V40K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		5000K	MRL01100W27V50K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
110W	347/480V	3000K	MRL01110W48V30K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		3500K	MRL01110W48V35K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		4000K	MRL01110W48V40K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		5000K	MRL01110W48V50K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
150W	120-277V	3000K	MRL01150W27V30K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		3500K	MRL01150W27V35K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		4000K	MRL01150W27V40K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		5000K	MRL01150W27V50K[SG,D,B,W][Blank,P0][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
150W	347-480V	3000K	MRL01150W48V30K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		3500K	MRL01150W48V35K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		4000K	MRL01150W48V40K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium
		5000K	MRL01150W48V50K[SG,D,B,W][Blank,P3,P4][Blank,M]T3[Blank,0-9 or A-Z or a-z]	Premium