

# 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

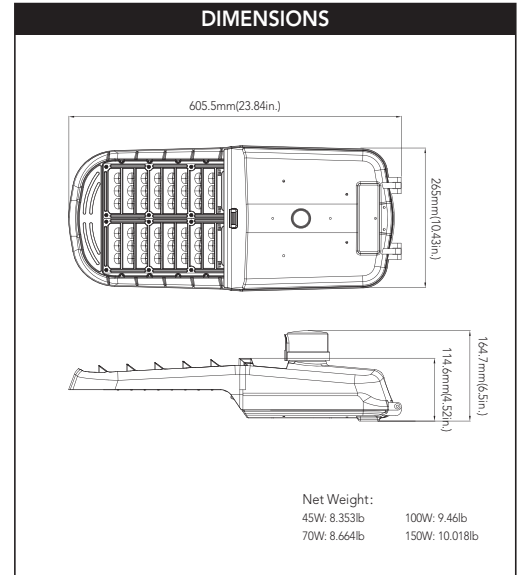
- Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation.
- Standard 1-10V dimming and 10kV/10kA common- and differential- mode surge protection available.
- Greater than 0.9 power factor, less than 20% harmonic distortion, and is suitable for operation 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

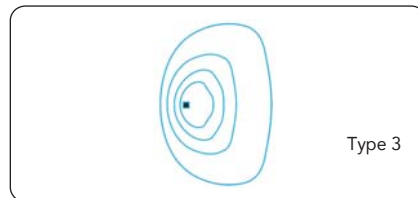
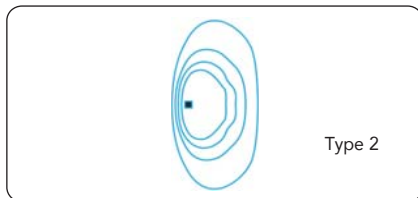
- Five-year warranty.



## 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"/>
<b>MRL01</b>	<b>45</b> 45W <b>70</b> 70W <b>100</b> 100W <b>150</b> 150W	<b>27V</b> 120-277V <b>48V</b> 347-480V	<b>30K</b> 3000K <b>35K</b> 3500K <b>40K</b> 4000K <b>50K</b> 5000K	<b>SG</b> Silver Gray <b>D</b> Dark Bronze <b>B</b> Black <b>W</b> White	<b>P0</b> 120-277V Photocell <b>P3</b> 347V Photocell <b>P4</b> 480V Photocell <b>Blank</b> Without Photocell	<b>M</b> With Sensor <b>Blank</b> Without Sensor	<b>T2</b> TYPE II Photometry <b>T3</b> TYPE III Photometry	<b>Blank</b> <b>Alphanumeric</b>

# 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