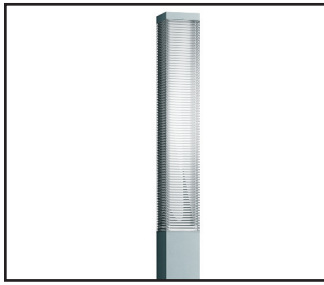


MTR Square Column LED **selux**







Project: _____

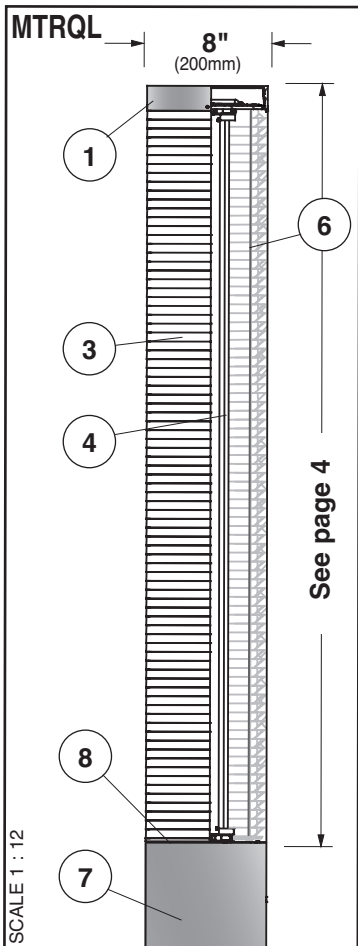
Type: _____ **Qty:** _____

MTRQL _____
 Series Nominal Overall Height Nominal Height of Lit Section Light Engine CCT Finish Voltage

Options

Series	Nominal Overall Height	Nominal Height of Lit Section	Light Engine	CCT	Finish	Voltage	Options
MTRQL MTR Square Column LED	10 10'	2 2'	1B30 	27 2700 K	WH White	UNV ⁴	DM Dimming (0-10V)
	12 12'	3 3'	2B30 	30 3000 K	BK Black	120	HL50 ² Hi-Lo Switching (see p. 5)
	14 14'	4 4'	3B30 	35 3500 K	BZ Bronze	208	REC ³ GFCI Receptacle
	16 16'		4B30 	40 4000 K	SV Silver	240	REC ² GFCI Receptacle w/ lockable cover
				Consult factory for other CCTs	SP Specify Premium Color	277	MS Motion Sensor w/ Optional Photocell (Meets Title 24 requirements)
						347 ¹	
						480 ¹	

¹ Requires step down transformer ² 120V, 240V, and 277V only ³ 120V only ⁴ 120V - 277V



1. Luminaire Cover - Die-cast, aluminum cover, with smooth crisp form to reflect and complement the thick-walled, column design. Removes by loosening four, stainless steel set screws for easy access to lamp chamber.

2. Gasketing - (not shown) Continuous gaskets provide weather-proofing, dust, and insect control at base of column, fixture cover, and between MTR rings.

3. Shielding - Consists of 8" (200mm) square injection-molded acrylic multi-prisms for total reflection (MTR). MTR rings have a wall thickness of .591" and are patterned after the light-bending characteristics of a prism.

4. LED Light Engine - High efficiency LED light engine equipped with brand-name LEDs, available in 2700K, 3000K, 3500K, or 4000K CCT tolerance within a 3-step MacAdams ellipse.

5. Drivers - (not shown) Electronic universal 120-277V, PFC > 0.95

6. Diffuser - LED optimized UV resistant material ensures evenly lit MTR rings at high transmittance.

7. Column - Extruded low-copper aluminum, 7 7/8" square, including handholes for access to gear tray and mounting plate.

8. Column Fitter - Die-cast aluminum fitter, with built-in gasketing ridges, for smooth transition to column.

9. Surge Protector - (not shown) Designed to protect luminaire from electrical surge (10kA).

10. Hi-Lo Switching - (not shown) For details, please see page 5.

11. Thermal Foldback - (not shown) Integrated Thermal Foldback circuit will reduce the drive current if the ambient temperature exceeds the maximum rated ambient temperature. This ensures maximum light output in various operating conditions while assuring long-term lumen maintenance.

Exterior Luminaire Finish - Selux utilizes a high quality Polyester Powder Coating. All Selux luminaires and poles are finished in our Tiger Drylac certified facility and undergo a five stage intensive pretreatment process where product is thoroughly cleaned, phosphated and sealed. Selux powder coated products provide excellent salt and humidity resistance as well as ultra violet

resistance for color retention. All products are tested in accordance with test specifications for coatings from ASTM and PCI.

Standard exterior colors are White (WH), Black (BK), Bronze (BZ), and Silver (SV). Selux premium colors (SP) are available, please specify from your Selux color selection guide.

5 Year Limited LED Luminaire Warranty - Selux offers a 5 Year Limited Warranty to the original purchaser that the MTR Column LED luminaire shall be free from defects in material and workmanship for up to five (5) years from date of shipment. This limited warranty covers the LED driver and LED array when installed and operated according to Selux instructions. For MTR Square Column LED luminaire suitable for ambient temperature of 45°C (113°F). For details, see "Selux Terms and Condition of Sale."

Listings and Ratings: Tested to INRTL Wet Location and IESNA LM-79-08 standards. LED tested to LM-80 standards. Luminaire and LED tested at 25°C (77°F) ambient temperature.

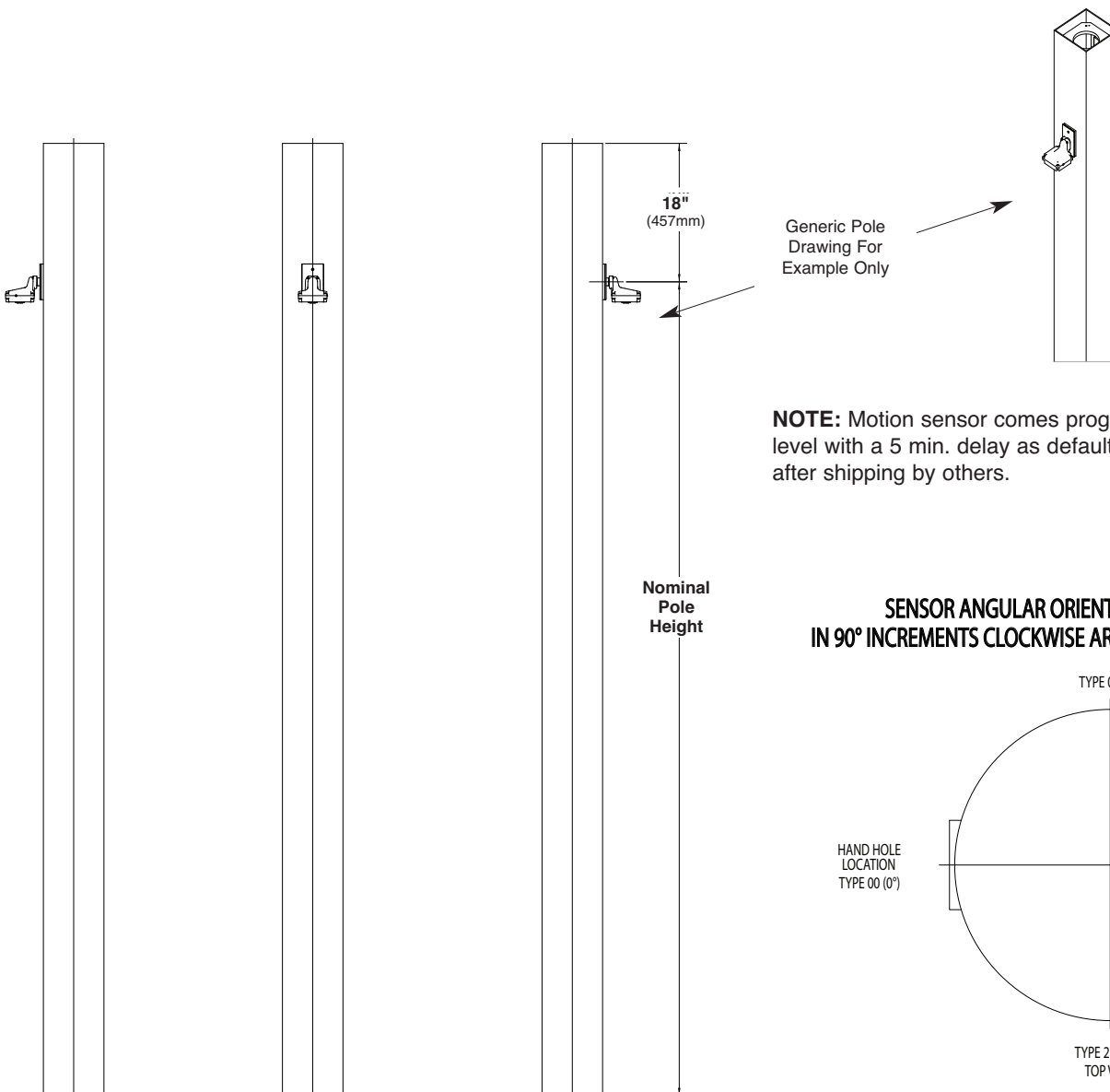
MTR Square Column LED



Motion Sensor

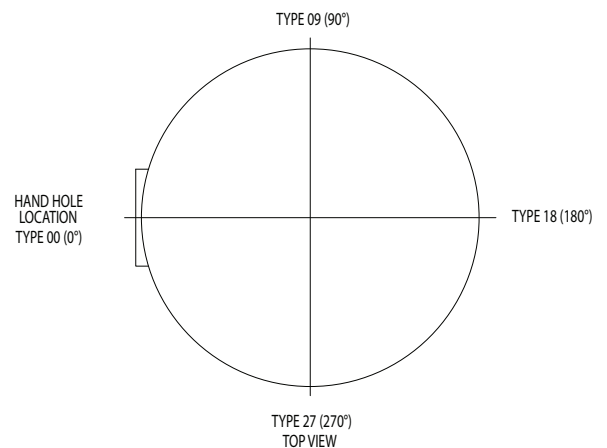
The Selux outdoor rated sensor incorporates Passive Infrared (PIR) technology for motion sensing and also includes and built in photocell. Designed to mount directly through a 1/2" KO in a single gang faceplate on pole/column, the SBO utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size while preventing false tripping from the environment.

Series	Optics	Hand Hole Orientation	Program	Color	Photocell Feature	Voltage
MS Motion Sensor	1 270° coverage - Single Sensor	00	D0 0V=0%	WH White	Y Yes	UNV 347 480
		09	D1 1V=10%	BK Black	N No	
		18	D3 3V=30%	BZ Bronze		
		27	D5 5V=50%			
			Goes from dim level to full bright upon motion			



NOTE: Motion sensor comes programmed at 30% dimmed level with a 5 min. delay as default. All programming required after shipping by others.

SENSOR ANGULAR ORIENTATION FROM HAND HOLE 0° IN 90° INCREMENTS CLOCKWISE AROUND POLE (TYPE 00,09,18,27)



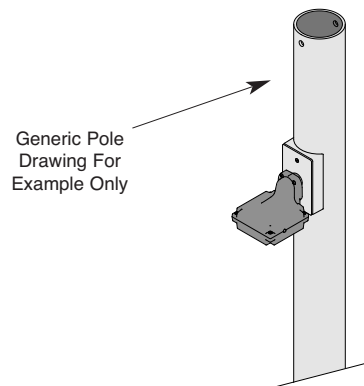
MTR Square Column LED

selux

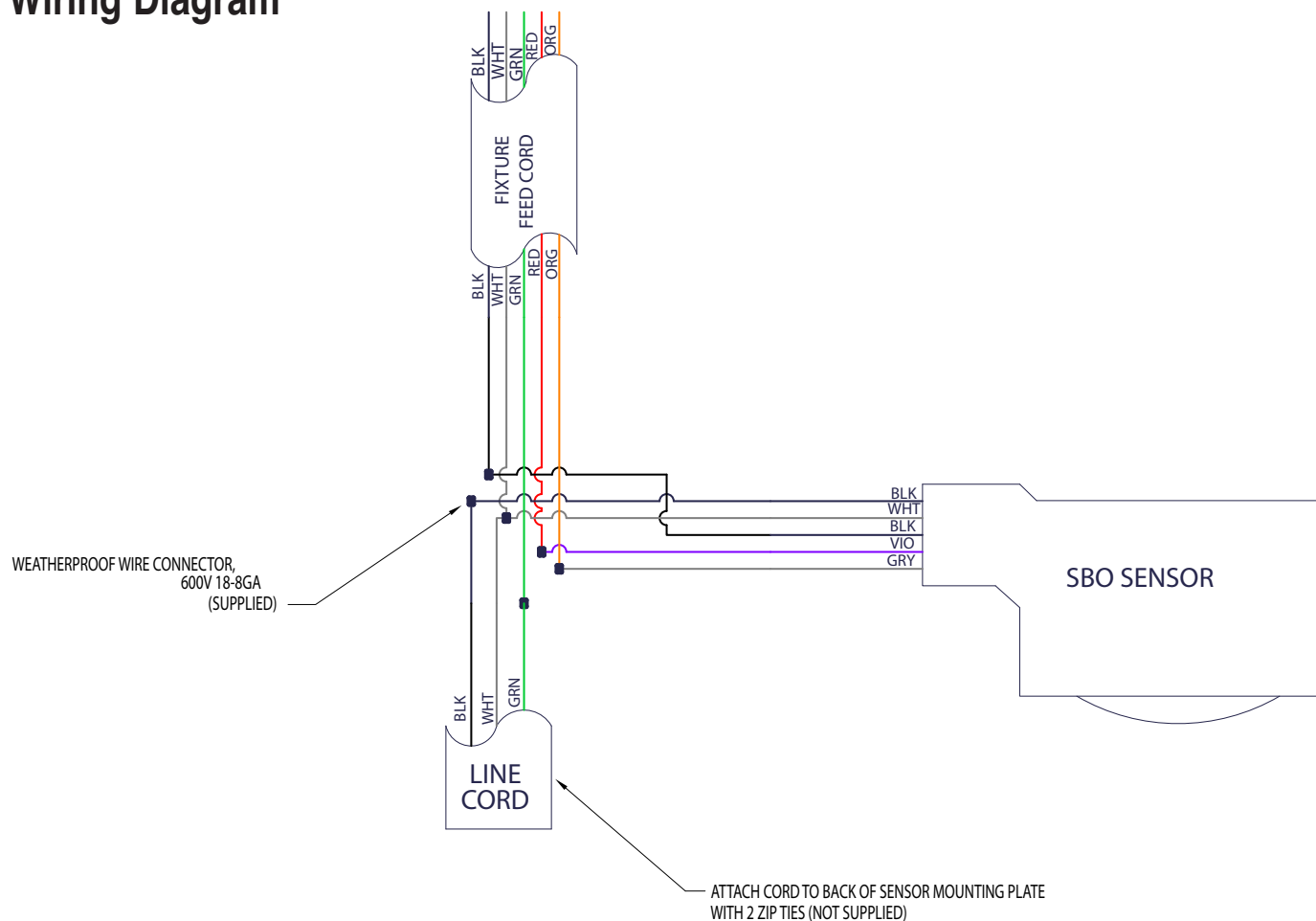
Motion Sensor Features

Features

- 100% Digital PIR Detection, excellent RF Immunity
- 270° coverage pattern
- Up to 30ft mounting
- IP66 Rated for outdoor applications
- Built-in 1kV surge protection
- No minimum load requirements
- Made for LED light source
- Interchangeable hot and load wires - impossible to wire backwards
- Adjustable time delays, max/min dim levels and ramp rates
- Programming button accessible without opening sensor or removing gaskets
- No field calibration or sensitivity adjustments required
- Non-volatile setting memory
- Convenient test mode
- Suitable for Title 24 applications



Wiring Diagram



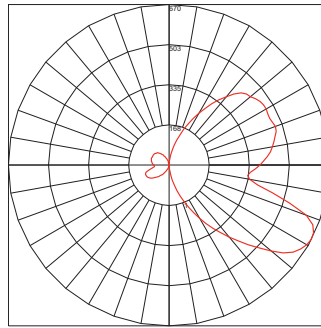
MTR Square Column LED



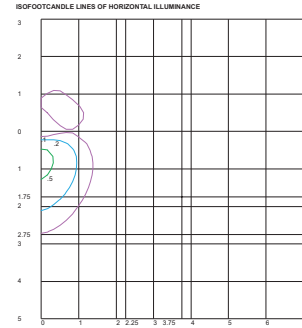
Photometry

MTRQL / 1B30 / 3000K CCT
Catalog # MTRQL-X-4-1B30-30-X

- Maximum candela of 670.23 at 62.5° from vertical.
- IES classification - B1-U5-G2
- Mounting Height = 16' (4.87 M)
- 2588 Delivered Lumens
- 97 Lumens per Watt
- CRI: 94.9 Ra
- Total Harmonic Distortion: 11.6%
- Power Factor: 0.978



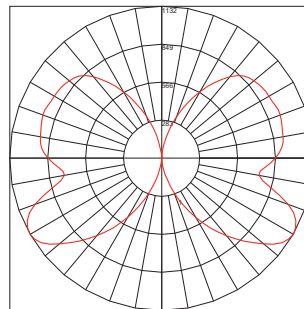
Maximum Candela = 670.23 Located At Horizontal Angle = 355, Vertical Angle = 62.5
 # 1 - Vertical Plane Through Horizontal Angles (255 - 175) (Through Max. Cz)



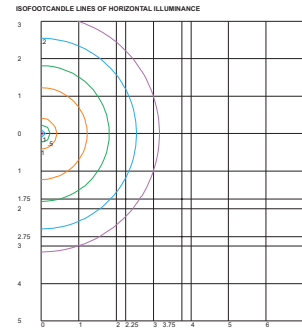
Distance In Units Of Mounting Height
 Values Based On 16 Foot Mounting Height

MTRQL / 4B30 / 4000K CCT
Catalog # MTRQL-X-4-4B30-40-X

- Maximum candela of 1132.19 at 60° from vertical.
- IES classification - B2-U5-G3
- Mounting Height = 16' (4.87 M)
- 10216 Delivered Lumens
- 96 Lumens per Watt
- CRI: 94.9 Ra
- Total Harmonic Distortion: 4.22%
- Power Factor: 0.997

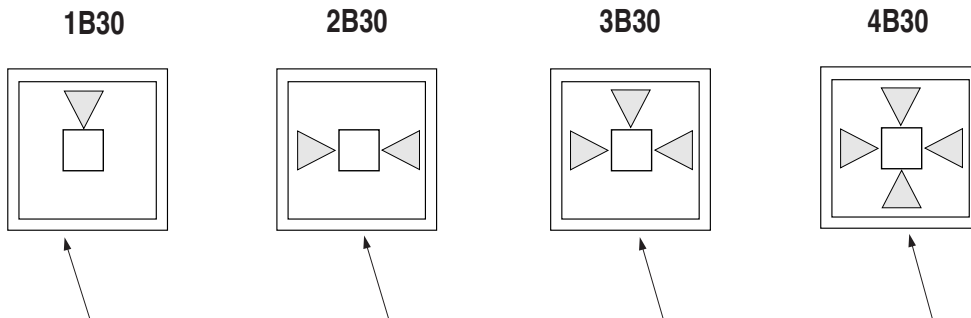


Maximum Candela = 1132.19 Located At Horizontal Angle = 0, Vertical Angle = 60
 # 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cz)



Distance In Units Of Mounting Height
 Values Based On 16 Foot Mounting Height

LED Lighting Distribution Guide



Handhole Side - For MTRQL, fixture head orientation in relation to Handhole is field adjustable.

MTR Square Column LED Photometry Multiplier Table		
CCT Multiplier		
4000K	1.000	
3500K	1.010	
3000K	0.942	
2700K	0.884	
Light Engine Multiplier		
Light Engine	Lumens	Wattages
1B30	0.253	0.250
2B30	0.502	0.506
3B30	0.744	0.745
4B30	1.000	1.000
Lit Section Multiplier		
Nonminal Hight	Lumens	Wattages
2'	0.500	0.500
3'	0.750	0.750
4'	1.000	1.000

MTR Square Column LED



Photometry

MTR Square Column LED Lumen Matrix								
Model#	Watts	Delivered Lumens	MTRQL Toolbox Scale Factor	Lumens/Watt	Light Engine Multiplier	CCT Multiplier		
Single Light Engine (1B30)								
MTRQL-X-2-1B30-27-XX-UNV	13.29	1215	0.44211	91.4	0.253	2700K (Multiplier = 0.884)		
MTRQL-X-3-1B30-27-XX-UNV	19.93	1822	0.66316	91.4				
MTRQL-X-4-1B30-27-XX-UNV	26.57	2430	0.88421	91.4				
Double Light Engine (2B30)								
MTRQL-X-2-2B30-27-XX-UNV	26.87	2409	0.44211	89.7	0.502		2700K (Multiplier = 0.884)	
MTRQL-X-3-2B30-27-XX-UNV	40.31	3614	0.66316	89.7				
MTRQL-X-4-2B30-27-XX-UNV	53.74	4819	0.88421	89.7				
Triple Light Engine (3B30)								
MTRQL-X-2-3B30-27-XX-UNV	39.58	3569	0.44211	90.2	0.744			2700K (Multiplier = 0.884)
MTRQL-X-3-3B30-27-XX-UNV	59.36	5354	0.66316	90.2				
MTRQL-X-4-3B30-27-XX-UNV	79.15	7138	0.88421	90.2				
Quad Light Engine (4B30)								
MTRQL-X-2-4B30-27-XX-UNV	53.15	4796	0.44211	90.2	0.884	2700K (Multiplier = 0.884)		
MTRQL-X-3-4B30-27-XX-UNV	79.73	7193	0.66316	90.2				
MTRQL-X-4-4B30-27-XX-UNV	106.30	9591	0.88421	90.2				
Single Light Engine (1B30)								
MTRQL-X-2-1B30-30-XX-UNV	13.29	1294	0.47091	97.4	0.253		3000K (Multiplier = 0.942)	
MTRQL-X-3-1B30-30-XX-UNV	19.93	1941	0.70637	97.4				
MTRQL-X-4-1B30-30-XX-UNV	26.57	2588	0.94183	97.4				
Double Light Engine (2B30)								
MTRQL-X-2-2B30-30-XX-UNV	26.87	2566	0.47091	95.5	0.502			3000K (Multiplier = 0.942)
MTRQL-X-3-2B30-30-XX-UNV	40.31	3850	0.70637	95.5				
MTRQL-X-4-2B30-30-XX-UNV	53.74	5133	0.94183	95.5				
Triple Light Engine (3B30)								
MTRQL-X-2-3B30-30-XX-UNV	39.58	3802	0.47091	96.1	0.744	3000K (Multiplier = 0.942)		
MTRQL-X-3-3B30-30-XX-UNV	59.36	5703	0.70637	96.1				
MTRQL-X-4-3B30-30-XX-UNV	79.15	7603	0.94183	96.1				
Quad Light Engine (4B30)								
MTRQL-X-2-4B30-30-XX-UNV	53.15	5108	0.47091	96.1	0.942		3000K (Multiplier = 0.942)	
MTRQL-X-3-4B30-30-XX-UNV	79.15	7662	0.70637	96.8				
MTRQL-X-4-4B30-30-XX-UNV	106.30	10216	0.94183	96.1				
Single Light Engine (1B30)								
MTRQL-X-2-1B30-35-XX-UNV	13.29	1388	0.50518	104.5	0.253			3500K (Multiplier = 1.010)
MTRQL-X-3-1B30-35-XX-UNV	19.93	2082	0.75777	104.5				
MTRQL-X-4-1B30-35-XX-UNV	26.57	2776	1.01036	104.5				
Double Light Engine (2B30)								
MTRQL-X-2-2B30-35-XX-UNV	26.87	2753	0.50518	102.5	0.502	3500K (Multiplier = 1.010)		
MTRQL-X-3-2B30-35-XX-UNV	40.31	4130	0.75777	102.5				
MTRQL-X-4-2B30-35-XX-UNV	53.74	5506	1.01036	102.5				
Triple Light Engine (3B30)								
MTRQL-X-2-3B30-35-XX-UNV	39.58	4078	0.50518	103.1	0.744		3500K (Multiplier = 1.010)	
MTRQL-X-3-3B30-35-XX-UNV	59.36	6117	0.75777	103.1				
MTRQL-X-4-3B30-35-XX-UNV	79.15	8157	1.01036	103.1				
Quad Light Engine (4B30)								
MTRQL-X-2-4B30-35-XX-UNV	53.15	5480	0.50518	103.1	1.010			3500K (Multiplier = 1.010)
MTRQL-X-3-4B30-35-XX-UNV	79.73	8219	0.75777	103.1				
MTRQL-X-4-4B30-35-XX-UNV	106.30	10959	1.01036	103.1				
Single Light Engine (1B30)								
MTRQL-X-2-1B30-40-XX-UNV	13.29	1374	0.50000	103.4	0.253	4000K (Multiplier = 1.000)		
MTRQL-X-3-1B30-40-XX-UNV	19.93	2061	0.75000	103.4				
MTRQL-X-4-1B30-40-XX-UNV	26.57	2748	0.25334	103.4				
Double Light Engine (2B30)								
MTRQL-X-2-2B30-40-XX-UNV	26.87	2725	0.50000	101.4	0.502		4000K (Multiplier = 1.000)	
MTRQL-X-3-2B30-40-XX-UNV	40.31	4088	0.75000	101.4				
MTRQL-X-4-2B30-40-XX-UNV	53.74	5450	0.50244	101.4				
Triple Light Engine (3B30)								
MTRQL-X-2-3B30-40-XX-UNV	39.58	4037	0.50000	102.0	0.744			4000K (Multiplier = 1.000)
MTRQL-X-3-3B30-40-XX-UNV	59.36	6055	0.75000	102.0				
MTRQL-X-4-3B30-40-XX-UNV	79.15	8073	0.74426	102.0				
Quad Light Engine (4B30)								
MTRQL-X-2-4B30-40-XX-UNV	53.15	5424	0.50000	102.0	1.000	4000K (Multiplier = 1.000)		
MTRQL-X-3-4B30-40-XX-UNV	79.73	8135	0.75000	102.0				
MTRQL-X-4-4B30-40-XX-UNV	106.30	10847	1.00000	102.0				

MTR Square Column LED

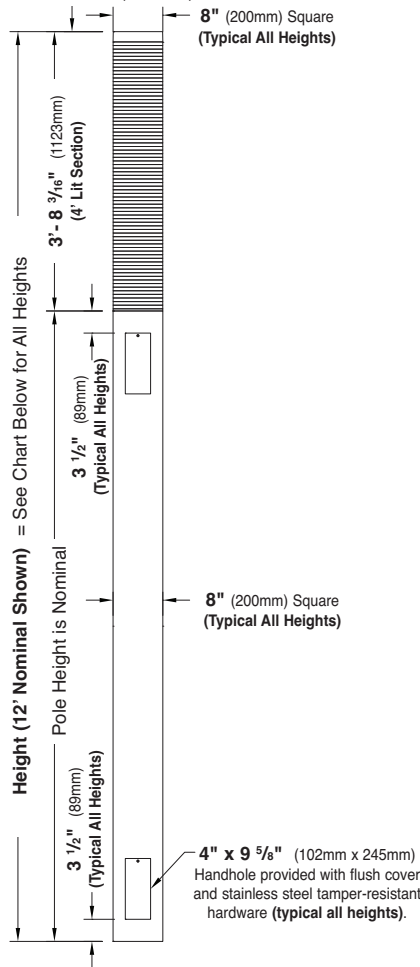


Mounting Details - MTRQL



Minimum clearance required
(for maintenance or future upgrades)
*consult factory for alternative recommendations
if access above fixture is not available

4' head = 60" (1524mm)
3' head = 48" (1219mm)
2' head = 36" (914mm)



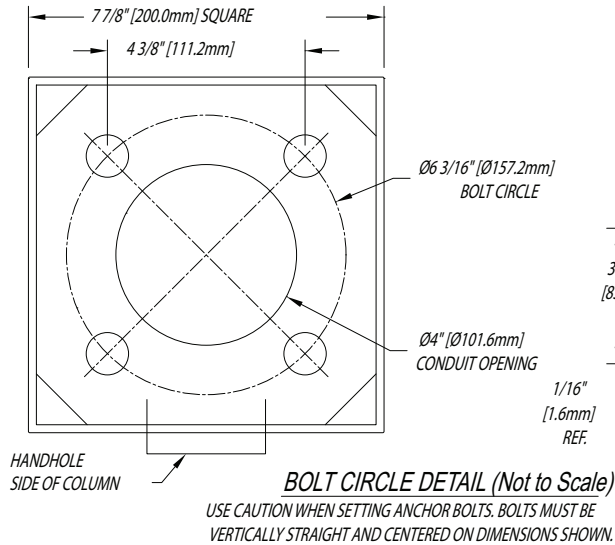
Overall Height Nominal (Actual)	Lit Section Nominal (Actual)	Pole Height Nominal (Actual)	ASSHTO 1994 Max EPA Wind Rating	ASSHTO 2001 Max EPA Wind Rating	ASSHTO 2009 Max EPA Wind Rating
10' (10')	4' (3' - 8 ³ / ₁₆ "	6' (6' - 3 ¹³ / ₁₆ "	200mph	200mph	200mph
10' (10')	3' (2' - 9 ⁷ / ₈ "	7' (7' - 2 ¹ / ₈ "	200mph	200mph	200mph
10' (10' - 2 ¹³ / ₁₆ "	2' (1' - 11 ¹ / ₁₆ "	8' (8' - 3 ¹³ / ₁₆ "	200mph	200mph	200mph
12' (12')	4' (3' - 8 ³ / ₁₆ "	8' (8' - 3 ¹³ / ₁₆ "	200mph	200mph	200mph
12' (12')	3' (2' - 9 ⁷ / ₈ "	9' (9' - 2 ¹ / ₈ "	200mph	200mph	200mph
12' (12' - 2 ¹³ / ₁₆ "	2' (1' - 11 ¹ / ₁₆ "	10' (10' - 3 ¹³ / ₁₆ "	200mph	200mph	200mph
14' (14')	4' (3' - 8 ³ / ₁₆ "	10' (10' - 3 ¹³ / ₁₆ "	200mph	200mph	200mph
14' (14')	3' (2' - 9 ⁷ / ₈ "	11' (11' - 2 ¹ / ₈ "	200mph	200mph	200mph
14' (14' - 2 ¹³ / ₁₆ "	2' (1' - 11 ¹ / ₁₆ "	12' (12' - 3 ¹³ / ₁₆ "	200mph	200mph	200mph
16' (16')	4' (3' - 8 ³ / ₁₆ "	12' (12' - 3 ¹³ / ₁₆ "	190mph	190mph	190mph
16' (16')	3' (2' - 9 ⁷ / ₈ "	13' (13' - 2 ¹ / ₈ "	190mph	190mph	190mph
16' (16')	2' (1' - 11 ¹ / ₁₆ "	14' (14' - 0 ¹⁵ / ₁₆ "	190mph	190mph	190mph

MTR Square Column LED

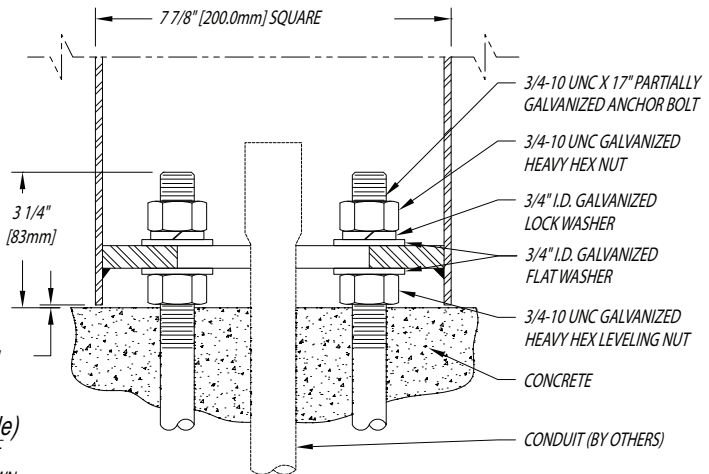


Mounting Details

MTRQL Bolt Circle

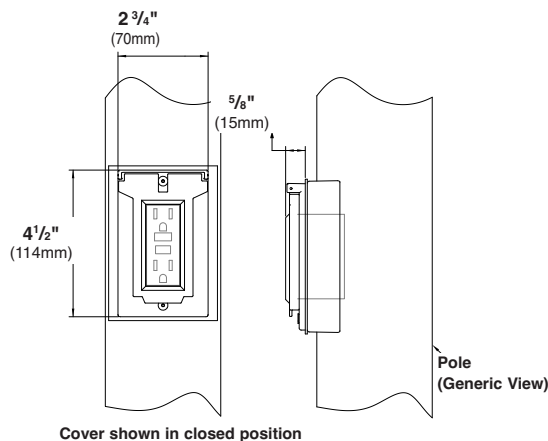


MTRQL Anchor Bolt Detail

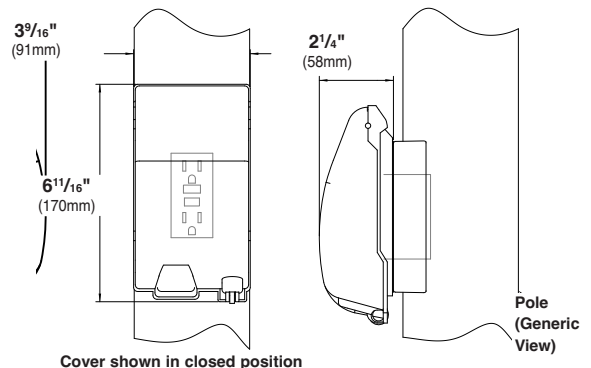


Option Details

GFCI Receptacle (REC) - GFCI duplex receptacle with cast base welded to pole and gasketed, provided with weather-proof, self-closing cover; located 36" (915mm) from base of pole, inline with handhole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel. For use with 120V applications only. For other fixture voltages, please consult factory for wire segregation requirements.



GFCI Receptacle (REC2) - GFCI duplex receptacle with cast base welded to pole and gasketed, provided with weather-proof, self-closing lockable cover; located 36" (915mm) from base of pole, inline with handhole. Receptacle is intended only for portable tools or other portable equipment to be connected to outlet only when attended by operating personnel. For use with 120V applications only. For other fixture voltages, please consult factory for wire segregation requirements.



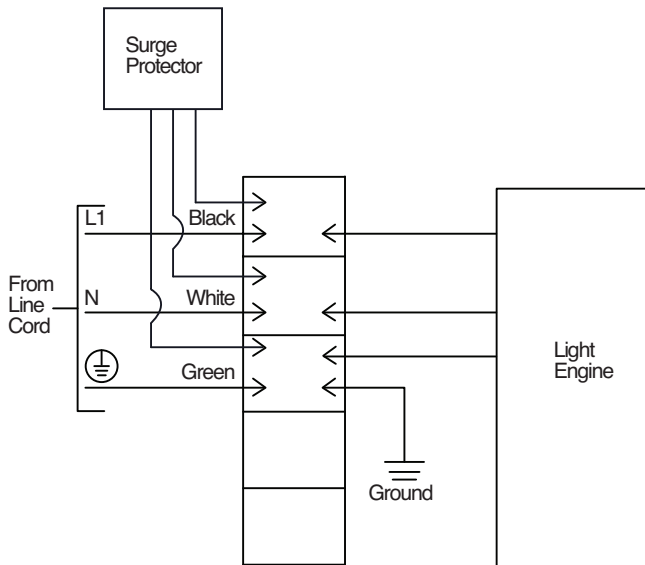
MTR Square Column LED

selux

Wiring Diagrams

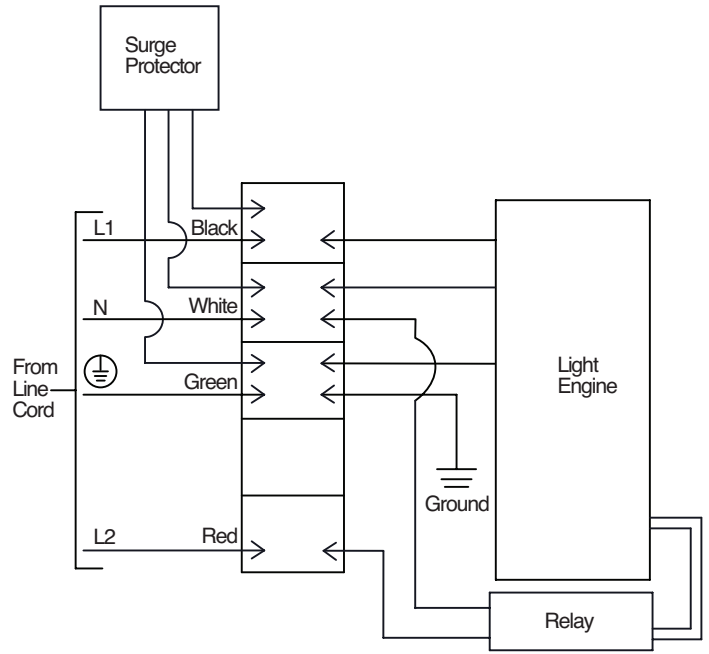
Standard Single Wiring

For 120-277V



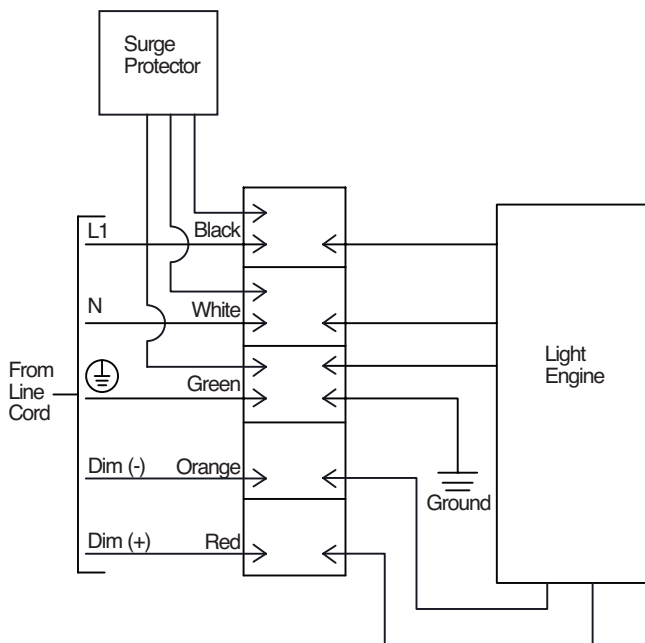
Hi-Lo Switching Option (HL) Wiring

For 120-277V. When red is energized, light output will be at "Lo" level. Standard HL level: HL50 = low output, 50%. For other "Lo" levels, consult factory.



0-10V Dimming Option (DM) Wiring

For 120-277V

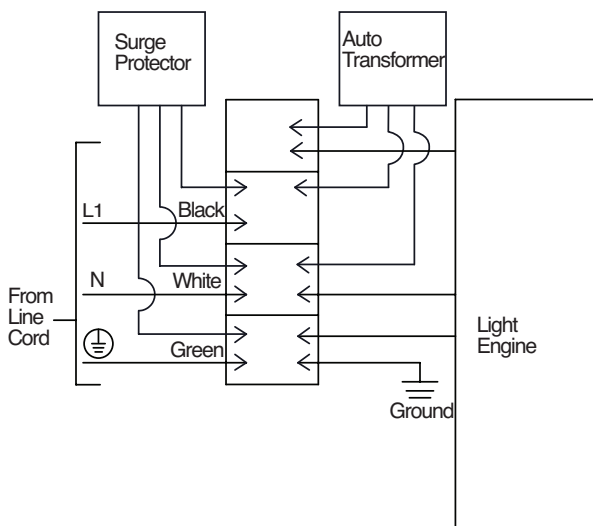


MTR Square Column LED

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Wiring Diagrams

347/480V (Standard)



347/480V with 0-10V Dimming Option

