FMR LED

These multi-functional and feature-rich fixtures are capable of both meeting and exceeding the demands of the food processing industry, industrial and commercial environments and architectural applications.

CLASSIFICATION

CLASS I	
Division 2	Groups A, B, C, D
Zone 2	Groups IIC
CLASS II	
Division 2	Groups F, G
Zone 22	Groups IIIB
CLASS III	

Contact your ABB sales representative to verify classification













FMR LED

Key features and benefits

Housing

- Copper-free high-pressure die-cast aluminum
- · Lens and case are designed to withstand severe impact
- Gore® vented pressure equalization

Finish

- Polyurethane multi-layer powder coating with anti-graffiti properties suitable for interior and exterior surfaces
- Easy cleaning and very smooth to prevent particulate from accumulating
- Resistant to impact, humidity and high chlorine environments
- Superior surface bonding to prevent dripping

Power supplies

- Two independent power supplies for increased reliability
- Two input power ranges for flexibility
- Built-in temperature control adjusts power output in case of extreme ambient temperatures in order to maintain illumination while protecting the luminaire
- High performance LED drivers for better efficiency and up to 100,000 hours of maintenance-free operation (LM-80)
- Built-in junction box with 3/4" NPT entry for electrical termination within sealed cavity

Thermal management

- Surface area ensures LEDs are kept running at maximum efficiency in temperatures up to 55 $^{\circ}\text{C}$
- Unique heat sink design creates increased airflow for optimal LED and power supply operating temperatures

CREE LEDs

- · Proven reliability and high efficiency
- Superior CRI (90+)

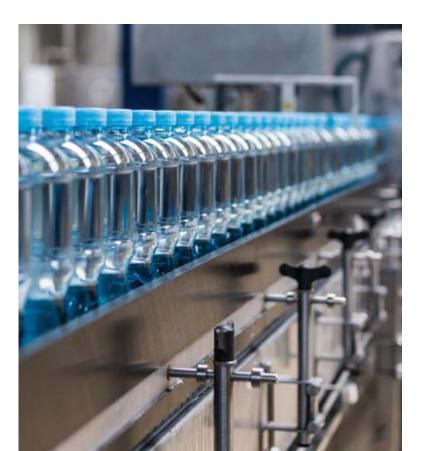
Electrical ratings

Luminance	Rated wattage (watts)	Rated voltage (volts)	Frequency (Hz)	Rated current (amps)
FMR10	107	120-277	50/60	1.11-0.48
-	129	347-480	50/60	0.43-0.31
FMR15	145	120-277	50/60	1.42-0.61
-	145	347-480	50/60	0.47-0.34
FMR20	190	120-277	50/60	1.74-0.75
-	187	347-480	50/60	0.59-0.42
FMR25	247	120-277	50/60	2.18-0.95
-	248	347-480	50/60	0.74-0.53
FMR30	312	120-277	50/60	2.82-1.22
-	310	347-480	50/60	0.96-0.70

Applications	
High mast	
Parking lots	
Tunnels	
Loading docks	
Swimming pools	
High bay	
Food processing	
Coolers and freezers	
Inspection	
Meat processing	
Quality control areas	
Packaging areas	
Hangars	
Storage facilities	
Oil and gas processing	
Agricultural	
Marine/wet environments	
Chemical/industrial facilities	

Light engine

- · Metal core printed circuit board
- Fault tolerant and fail-over design ensures reliability and resilience to damage



FMR LED

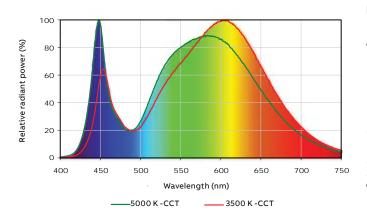
Key features and benefits

Temperature range chart

			Optical models		Flood models	All models
Luminance	Rated voltage (volts)	Ambient temp (°C)	Class I, Div 2 T-Codes	Ambient temp (°C)	Class I, Div 2 T-codes	Class II, Div 2 T-codes
FMR10	120-277	-40 to 55	T3C	-40 to 55	T4A	T5
	347-480	-40 to 54	T3C	-40 to 51	T4	T5
FMR15	120-277	-40 to 55	T3C	-40 to 55	T4A	T5
	347-480	-40 to 54	T3C	-40 to 51	T4	T5
FMR20	120-277	-40 to 55	T3C	-40 to 55	T4A	T5
	347-480	-40 to 54	T3C	-40 to 51	T4	T5
FMR25	120-277	-40 to 51	T3C	-40 to 55	T4A	T5
	347-480	-40 to 44	ТЗВ	-40 to 50	T4A	T5
FMR30	120-277	-40 to 43	Т3	-40 to 42	T4A	T5
	347-480	-40 to 43	Т3	-40 to 40	Т3	T5

Color temperature

Available standard in 3500 K and 5000 K color temperatures, with additional color temperatures available from 2700 to 6500 K.

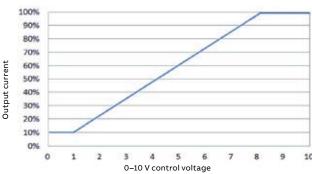


Light engine

- Metal core printed circuit board
- Fault-tolerant and fail-over design ensures reliability and resilience to damage

Dimming

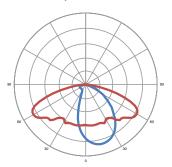
Driver will source a maximum of 200 μA for control needs. A controller must sink current from 0–10 V control leads. Dimming output from 10%–100%.

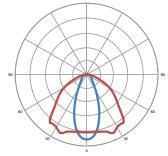


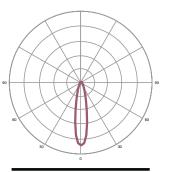
FMR LED

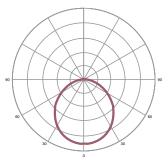
Key features and benefits

Modular optics









T2 - IES	T2 - IESNA Type 2 ¹		
Model	Lumens	Lumens/ Watts	
FMR10	12370	132	
FMR15	16340	130	
FMR20	20560	125	
FMR25	26090	117	
FMR30	31670	109	

OC - Oval¹		
Model	Lumens	Lumens/ Watts
FMR10	12370	132
FMR15	16340	130
FMR20	20560	125
FMR25	26090	117
FMR30	31670	109

SC - Narrow 18°1		
Model	Lumens	Lumens/ Watts
FMR10	12370	132
FMR15	16340	130
FMR20	20560	125
FMR25	26090	117
FMR30	31670	109

WC - Wide beam²		
Model	Lumens	Lumens/ Watts
FMR10	12370	132
FMR15	16340	130
FMR20	20560	125
FMR25	26090	117
FMR30	31670	109

Standard offering above, 13 alternate optical profiles available upon request.

Contact sales representative for further details. Minimum order quantities, additional costs and lead times may incur.

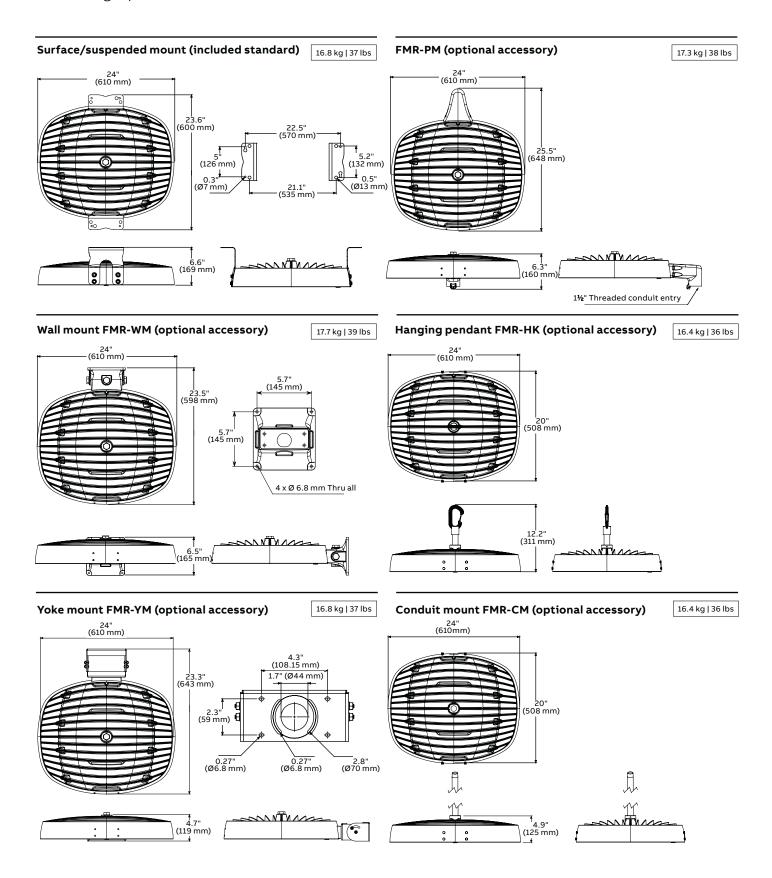
1. Denotes 'optical' model

- 2. Denotes 'flood' model



FMR LED

Mounting options



FMR LED

Numbering system

Lighting	fixture						
FMR30	WC	W	35	AC	HL	U	
1	2	3	4	5	6	7	

01. Fixture

Part	Part number	Description
1 Model	FMR10	12370 Lumens
	FMR15	16490 Lumens
	FMR20	20730 Lumens
	FMR25	26610 Lumens
	FMR30	31670 Lumens
2 Optics*	wc	Wide beam (no optics) ⁶
	Т2	IESNA Type 2 ⁵
	ОС	Oval, 26° x 108° ⁵
	sc	Spot 18° ⁵
3 Finish	W	White
4 Color	35	Warm white (3500 K) — CRI 80
	35H	Warm white (3500 K) — CRI 90
	50	Cool white (5000 K) — CRI 70
	50H	Cool white (5000 K) — CRI 90
5 Power	AC	120 to 277 V AC
	HV	347 to 480 V AC
6 Location	HL	Hazardous location
7 Market		Canadian market
	U	US market

02. Mounting options (order separately)

Part	Part number	Description
Mounting type	FMR-WM	Wall mount ⁴
	FMR-HK	Hanging pendant
	FMR-PM	Pole mount ⁴
	FMR-YM	Yoke mount ^{3,4}
	FMR-YK	High vibration yoke ^{2,3,4}
Color	WT	White finish

Notes

- 1. Minimum order quantities, additional costs and lead times may incur.
- Custom finishes and high vibration yoke mount are not available for NSF certified units.
- 3. Yoke mount only available in stainless steel finish.
- 4. IDA Fixture Seal of Approval only applies to fixtures with a CCT of 3000 K or less, and have fixed mounts aiming the fixture perpendicular to the ground.
- 5. Denotes 'optical' model
- 6. Denotes 'flood' model
- * All optics are clear (not frosted).



SMR LED

The unique combination of flexibility and robust design allows the implementation of this light fixture in various new or existing facilities. The SMR not only exceeds the expectations of an HID replacement, but establishes a new benchmark in versatility for industrial LED lighting.

CLASSIFICATION

CLASS I	
Division 2	Groups A, B, C, D, T4
Zone 2	Group IIC
CLASS II	
Division 2	Groups F, G
Zone 22	
CLASS III	T4A

Contact your ABB sales representative to verify classification









SMR LED

Key features and benefits

Features

- · Extremely robust
- · Thermally managed for longevity
- Easy field angle adjustment
- -40 to 55 °C operating range
- Lifespan up to 100,000 hours
- Sealed to IP66
- Extreme vibration resistance

Junction box

- Direct heat transfer from power supply to external case for optimal performance
- · Plenty of wiring space for optional accessories
- ¾" NPT entry
- IP 66/67 rated, suitable for wet locations

Thermal management

- Ample surface area of head ensures LEDs are kept running at maximum efficiency, even at 55 °C temperature
- Unique heat sink design creates increased airflow for optimal LED and power supply operating temperature
- Physical separation of electronics for increased system reliability
- Perimeter band adds ruggedness and channels heat through fins with laminar flow principles

Light engine

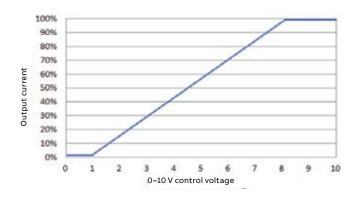
- · Metal core printed circuit board
- · Modular optics

Output

3050 to 6265 lumens

Dimming

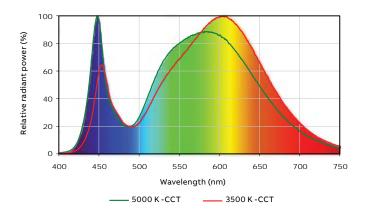
Driver will source a maximum of 200 μ A for control needs. A controller must sink current from 0–10 V control leads. Dimming output from 1–100%.



Applications
Hazardous locations
Indoor lighting
Tunnel lighting
Industrial facilities
Refinery and petrochemical facilities

Color temperature

Available standard 5000 K, with additional color temperatures available from 2700 to 6500 K.



Nichia LEDs

- · Proven reliability
- · High efficiency
- · Several CCT options for added design flexibility

Housing

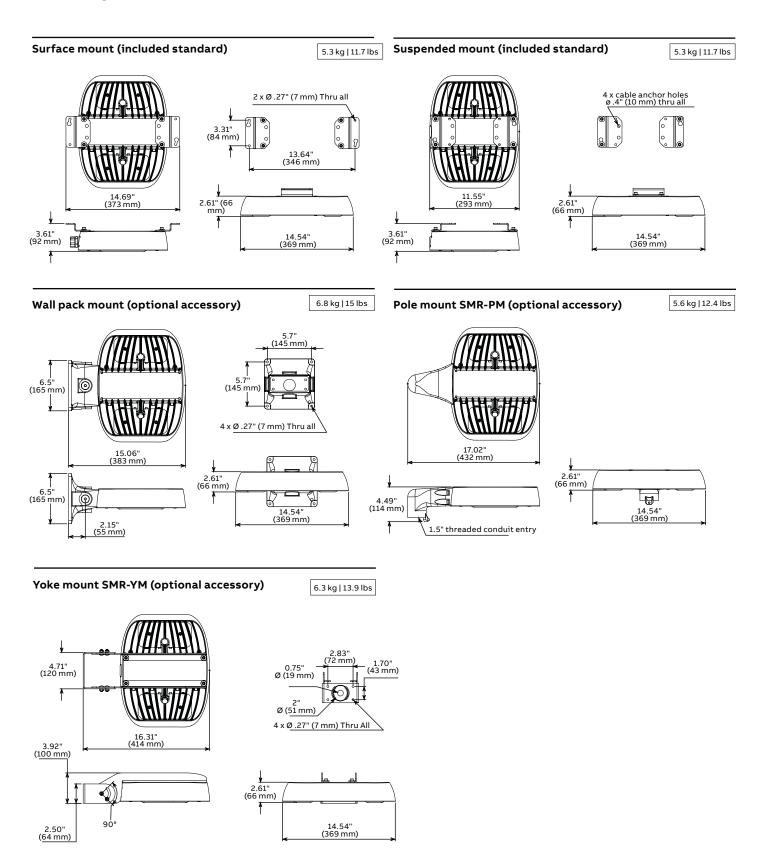
- · Copper-free high pressure die-cast aluminum case
- Triple-layer coating suitable for marine applications
- Physical separation between power supply and LEDs
- Lens and case are designed to withstand severe impact

Power supplies

- · Two input ranges for ultimate flexibility
- Utilizes high performance LED drivers for better efficiency and up to 100,000 hours of maintenance-free operation
- Built-in junction box with 3/4" NPT entry

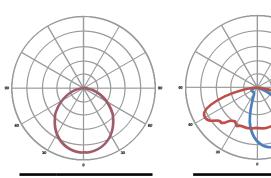
SMR LED

Mounting options

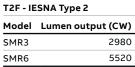


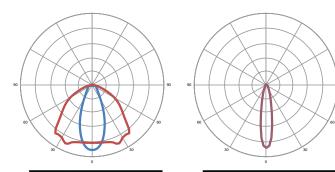
SMR LED¹

Optic options



WF - Wide beam (no optic)			
Model Lumen output (CW)			
SMR3	3050		
SMR6	5650		





OF - Oval 26° x 108°			
Model Lumen output (CW)			
SMR3	3290		
SMR6	6090		

SF - Spot 18°			
Model	Lumen output (CW)		
SMR3	3380		
SMR6	6265		

Standard offering above, 13 alternate optical profiles available upon request.



Numbering system



Custom **finish** available

Lighting fixture							
SMR6	WF	GY	CW	AC	HL	U	
1	2	3	4	5	6	7	

01. Lighting fixture

	Part	
Part	number	Description
1 Model	SMR3	3380 Lumens
	SMR6	6265 Lumens
2 Optics*	2F	IESNA Type 2
	OF	Oval 26° x 108°
	SF	Spot 15°
	WF	Wide (no optic)
3 Finish	GY	Gray
4 Color	CW	Cool white (5000 K)
5 Power	AC	120 to 277 V AC
	н٧	347 V AC
6 Location	HL	Hazardous location
7 Market		Canadian market
	U	US market

02. Mounting options (order separately)

	Part		
Part	number	Description	
Mounting type	SMR-WM	Wall pack mount ³	
	SMR-PM	Pole mount ³	
	SMR-YM	Yoke mount ^{2,3}	
Color	GY	Gray only	

Notas

- $1.\ Minimum\ order\ quantities,\ additional\ costs\ and\ lead\ times\ may\ incur.$
- 2. Yoke mount only available in stainless steel finish.
- 3. IDA Fixture Seal of Approval only applies to fixtures with a CCT of 3000K or less, and have fixed mounts aiming the fixture perpendicular to the ground.
- * All optics are "frosted" style.