

## LDRMH1

### Applications

The ISON™ LDRMH1 is a multi-purpose troffer retrofit designed to upgrade existing lighting troffer fixtures in Healthcare or other facilities. This technology creates an inhospitable environment for viruses, bacteria and other pathogens.

Vyv® kills\* viruses, bacteria, fungi, yeasts, mold. The Antimicrobial LED spectrum comes in a White Light Mode in 4000K 80 CRI that functions as a normal LED fixture allowing for day-to-day tasks to be completed while reducing viruses and bacteria on surfaces. Use the 'Antimicrobial Mode' when personnel are in the room for continuous antimicrobial action. Or use 'Enhanced Antimicrobial Mode' when white light not required. Enhanced Antimicrobial mode emits a higher dosage of Vyv anti-microbial wavelengths to maximize microbe suppression. Both modes meet international standards for continuous and unrestricted use around people. To add another layer of prevention the LDRMH1 is painted with Britex™ a white highly reflective antimicrobial coating to suppress growth of bacteria on the surface of the fixture.



LDRMH1A1UNVFDXX84022MSTVV-SP

### Features

- Antimicrobial LED Technology kills\*<sup>5</sup>:
  - Virus
  - Bacteria
  - Fungi
  - Yeast
  - Mold
  - And Many More! For a complete list see page 2
- Available with Britex™, Orion's proprietary coating with antimicrobial properties
- Installs in minutes with minimal disruption
- Field upgradeable and interchangeable lighting modules
- Various control solutions for mode operation

### Electrical

- Available in 120v-277v
- Full Dimming [0-10v] is standard
- Continuous disinfection white light option available in 4000k only. Powered by patented Vyv technology

### Ambient Operating Range

See ambient operating table on page 3

### Fixture Certification & Listings

- Patented LDR® design
- UL Classified
- Buy American Act Compliant

### Rated Life

L70 > 50,000 hours based on 10 hour day operation with Antimicrobial + Light Mode balanced with Enhanced Antimicrobial Mode

### Warranty

Orion ISON™ class LED fixtures are covered by a ten-year warranty excluding continuous disinfection white light option. Antimicrobial protection option is covered by a 5 year warranty. Accessories and individual components are covered by separate OEM supplier warranties.



# LDRMH1

## Performance Information, 120v, Antimicrobial+ Light Mode<sup>3</sup>

Series	Nominal Lumen Code	Actual Lumens	Wattage	LPW	CCT	CRI	Input Current	Power Factor
<b>2' x 2'</b>								
LDRMH1	A1	2,004lm	42w	48	4000K	≥80	0.35A	>.90
LDRMH1	B1	3,874lm	81w	48	4000K	≥80	0.67A	>.90
<b>2' x 4'</b>								
LDRMH1	D1	3,294lm	60w	55	4000K	≥80	0.50A	>.90
LDRMH1	E1	4,096lm	81w	51	4000K	≥80	0.67A	>.90
LDRMH1	F1	6,100lm	119w	47	4000K	≥80	0.94A	>.90
LDRMH1	G1	8,019lm	161w	50	4000K	≥80	1.35A	>.90

## Performance Information, 120v, Enhanced Antimicrobial Mode<sup>3</sup>

Series	Nominal Lumen Code	Actual Lumens	Wattage	LPW	CCT	CRI	Input Current	Power Factor
<b>2' x 2'</b>								
LDRMH1	A1	-	29w	-	-	-	0.25A	-
LDRMH1	B1	-	57w	-	-	-	0.48A	-
<b>2' x 4'</b>								
LDRMH1	D1	-	42w	-	-	-	0.35A	-
LDRMH1	E1	-	57w	-	-	-	0.48A	-
LDRMH1	F1	-	80w	-	-	-	0.67A	-
LDRMH1	G1	-	115w	-	-	-	0.96A	-

## Antimicrobial Light Protection Against the Following:<sup>5</sup>

Gram Positive Bacteria	Gram Negative Bacteria	Bacterial Endospores	Yeast and Filamentous Fungi	Virus
<ul style="list-style-type: none"> <li>Staphylococcus aureus (incl. MRSA)</li> <li>Staphylococcus epidermidis</li> <li>Staphylococcus hyicus</li> <li>Clostridium perfringens</li> <li>Clostridium difficile</li> <li>Enterococcus faecalis (inc. VRE)</li> <li>Streptococcus pyogenes</li> <li>Streptococcus thermophilus</li> <li>Lactobacillus plantarum</li> <li>Lactobacillus brevis</li> <li>Listeria monocytogenes</li> <li>Bacillus cereus</li> <li>Mycobacterium terrae</li> </ul>	<ul style="list-style-type: none"> <li>Acinetobacter baumannii (incl. MDRA)</li> <li>Pseudomonas aeruginosa</li> <li>Klebsiella pneumoniae</li> <li>Proteus vulgaris</li> <li>Enterobacter aerogenes</li> <li>Escherichia coli</li> <li>Salmonella enteritidis</li> <li>Salmonella typhimurium</li> <li>Shigella sonnei</li> <li>Serratia spp. (inc. S. marcescens)</li> </ul>	<ul style="list-style-type: none"> <li>Bacillus cereus</li> <li>Clostridium difficile</li> </ul>	<ul style="list-style-type: none"> <li>Aspergillus niger</li> <li>Candida albicans</li> <li>Saccharomyces cerevisiae</li> </ul>	<ul style="list-style-type: none"> <li>Enveloped Virus</li> <li>Non-Enveloped Virus</li> </ul>

## LDRMH1

### Ordering Information Example (NOTE: No dashes or spaces unless noted below)

Series	Nominal Lumen Code	Voltage	Driver Type	CRI; Color Temp	Fixture Size	Lens Options	Bracket Type	Fixture Healthcare Options	Packaging Options
LDRMH1	A1	UNV	FDXX	840	22	M	ST	VV	-SP

### Ordering Information

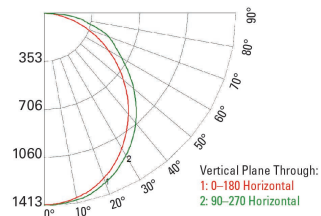
Series	Nominal Lumen Code <sup>1</sup>	Voltage	Driver Type <sup>2</sup>	CRI; Color Temp	Fixture Size	Lens Options	Bracket Type	Fixture Healthcare Options	Packaging Options
<b>LDRMH1=</b> ISON LED Retrofit Modular, Healthcare, Gen 1	<b>2x2</b> <b>A1=</b> 2,000lm <b>B1=</b> 4,000lm  <b>2x4</b> <b>D1=</b> 3,000lm <b>E1=</b> 4,000lm <b>F1=</b> 6,000lm <b>G1=</b> 8,000lm	<b>UNV=</b> 120v-277v	<b>FDXX=</b> Full Dimming 0-10v	<b>840=</b> 80CRI; 4000K	<b>22=</b> 2' x 2' <b>24=</b> 2' x 4'	<b>M=</b> Opaque Matte	<b>ST=</b> Standard <b>PL=</b> Plenum <b>LF=</b> Lift	<b>VV=</b> Vyv Antimicrobial Protection and Britex™ Coating	<b>[Blank]=</b> Bulk Pack <b>-SP=</b> Single Pack

Note: For a module retrofit upgrade contact your Orion Representative for part numbering and pricing

### Photometrics

Visit [orionlighting.com](http://orionlighting.com) to obtain all .IES files

#### E1 840 Antimicrobial + White Mode



### Ambient Operating Temperatures

Nominal Lumen Code	Operating Temperature Range
All Lumen Packages	0°C - 25°C [32°F - 77°F]

### Physical Information<sup>4</sup>

Nominal Lumen Code	Length/Width	Depth	Weight
A1/B1	The Orion LDR is designed to fit industry standard 2' x 2' and 2' x 4' T-Bar grid openings	3.13"	6.00lbs.
D1/E1/F1/G1		3.13"	11.00lbs.

### Accessories [Field Installed]

Additional Fixture Accessories	
<b>LDRM-SCBL-2FT-KIT</b>	2' x 2' Fixture Seismic Cable
<b>LDRM-SCBL-4FT-KIT</b>	2' x 4' Fixture Seismic Cable

### Accessory [Field Installed]



**Seismic Cable Kit  
(LDRM-SCBL-4FT-KIT)**

### Fixture Option [Factory Installed]



**Battery Back Up  
(-BB)**

### Additional Specification Information

<sup>1</sup> For actual lumens, see performance table

<sup>2</sup> "XX" is a character placeholder for the manufacturing configuration

<sup>3</sup> Actual performance may vary by up to ±10% of values listed; facility factors and fixture options can affect performance values

<sup>4</sup> Weight and depth will vary based on option selection. Does not include mounting brackets

<sup>5</sup> Testing on a non-enveloped virus (MS2 bacteriophage) showed a 99.985% reduction in controlled laboratory testing in 6 hours on hard surfaces. MRSA and E. coli showed 90%+ reduction in controlled laboratory testing in 24 hours on surfaces. Results may vary depending on the amount of light that is reaching the surfaces in the space where the product is installed and the length of time of exposure. Use of Vyy antimicrobial light is not intended to replace manual cleaning