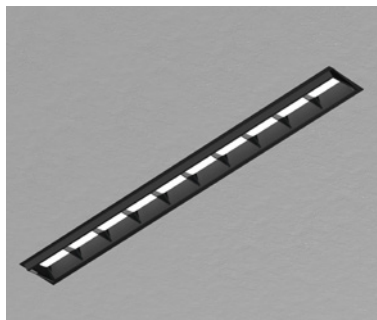


## RECESSED LINEAR WALL WASH



IC RATED



Cluster is the precise, and scalable family of downlights, wall washers, and adjustables, available in both linear and planar configurations and for recessed, pendant, and surface mounting. Based on a fundamental 1.2" square cell, Cluster deliver lighting that is optically sophisticated and aesthetically refined. Cluster recessed linear wall wash is available in 3 cell, 5 cell, and 10 cell configurations for smooth and uniform vertical illumination. No more than 1200 lumens. All recessed Cluster can install in a variety of configurations, either with an integral driver or a remote driver that is capable of power

Mounting can be ordered separately.

LUMINAIRE ID	INSTALLATION TYPE	MOUNTING OPTION <sup>1,2</sup>	TRIM TYPE	DRIVER	VOLTAGE	LUMEN PACKAGE <sup>3</sup>	DIMMING
<b>CLUR03</b> - Cluster Recessed 3x1 <b>CLUR05</b> - Cluster Recessed 5x1 <b>CLUR10</b> - Cluster Recessed 10x1	<b>OF</b> - Open Frame Type Non-IC <b>IC</b> - Type-IC <b>RM</b> - Remodel Type Non-IC <b>CP</b> - Chicago Plenum Type-IC (CCEA)	<b>ASB</b> - Adjustable standard bar hangers <b>FMB</b> - Flush mount bars <b>ACB</b> - Adjustable commercial bar hangers <b>AHC</b> - Adjustable hat channel bars <b>NA</b> - Not applicable  <sup>1</sup> See page 3 for more details. <sup>2</sup> Specify NA for remodel (RM) installation type.	<b>TRM</b> - Flanged trim <b>TLMP</b> - Trimless drywall mudplate <b>TLMW</b> - Trimless millwork	<b>INTEGRAL</b>	<b>120</b> - 120V <b>277</b> - 277V	<b>400</b> - 400 lm (CLUR03) <b>800</b> - 800 lm (CLUR05) <b>1200</b> - 1200 lm (CLUR10)  <sup>3</sup> Lumen packages shown at 3500K, with WRO. For other, see lumen output multipliers on page 5.	<b>D1</b> - 1% 0-10V <b>ELV</b> <sup>4</sup> - ELV 120V <b>TRI</b> <sup>4</sup> - TRIAC 120V  <sup>4</sup> Available with 120V only.
				<b>REMOTE</b>	<b>FOR FULL REMOTE DRIVER SPECIFICATION, SEE "REMOTE DRIVER" SECTION BELOW.</b>		

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LUMINAIRE ID	TRIM TYPE	LIGHT SOURCE	OPTIC	CRI	CLR. TEMP	TRIM FINISH <sup>5</sup>	LOUVER FINISH
<b>CLURL03</b> - Cluster Recessed 3x1	<b>TRM</b> - Flanged trim	<b>SW</b> - Static white	<b>WRO</b> - Wall wash	<b>90</b> - 90 CRI	<b>27</b> - 2700K	<b>TMW</b> - Textured matte white	<b>MF01</b> - Matte white
<b>CLURL05</b> - Cluster Recessed 5x1	<b>TLMP</b> - Trimless drywall mudplate				<b>30</b> - 3000K	<b>TMB</b> - Textured matte black	<b>MF04</b> - Matte black
<b>CLURL10</b> - Cluster Recessed 10x1	<b>TLMW</b> - Trimless millwork				<b>35</b> - 3500K	<b>CF#</b> - Custom finish, specify RAL#	
					<b>40</b> - 4000K	<sup>5</sup> Applicable for trim and trimless. Body finish matches trim finish.	

Continue here for full remote driver specifications. Remote driver can be ordered separately.

REMOTE DRIVER <sup>6</sup>	LUM. QTY. <sup>7</sup>	LUMINAIRE ID	VOLTAGE	LUMEN PACKAGE <sup>8,9</sup>	DIMMING <sup>10</sup>
<b>RDB#</b> - Remote driver  <sup>6</sup> If multiple driver boxes needed, specify a line number for each driver type used. (e.g. <b>RDB1-4X-CLUR03-...-RD1</b> <b>RDB2-2X-CLUR03-...-RD1</b> ...	<b>#X</b> - Number of luminaires  <sup>7</sup> Specify number of luminaires per remote driver. (e.g. <b>3X</b> )	<b>CLUR03</b> - Cluster Recessed 3x1 <b>CLUR05</b> - Cluster Recessed 5x1 <b>CLUR10</b> - Cluster Recessed 10x1	<b>120</b> - 120V <b>277</b> - 277V <b>UNV</b> - 120V-277V	<b>###</b> - Low <b>100</b> lm - Med <b>250</b> lm - High <b>400</b> lm (CLUR03) <b>###</b> - Low <b>200</b> lm - Med <b>500</b> lm - High <b>800</b> lm (CLUR05) <b>###</b> - Low <b>300</b> lm - Med <b>750</b> lm - High <b>1200</b> lm (CLUR10)  <sup>8</sup> Watts and lumen per watts will vary based on the number of light units per remote driver as well as on the type of driver selected. <sup>9</sup> Low and medium lumen packages are not available with RELV and RTRI dimming options.	<b>RD1</b> - 1% 0-10V <b>RELV</b> <sup>11</sup> - ELV 120V <b>RTRI</b> <sup>11</sup> - TRIAC 120V <b>RDA</b> <sup>12</sup> - DALI <b>RLTEA2W</b> <sup>11</sup> - Lutron 1% - 2 wire FP 120V <b>RLDE1</b> <sup>12</sup> - Lutron Hi-lume 1% Eco  <sup>10</sup> For configurations involving different cluster sizes on a remote driver, please consult factory. <sup>11</sup> Available with 120V only. <sup>12</sup> On-site commissioning is required.

## WHEN SPECIFYING WITH INTEGRAL DRIVER

WHEN SPECIFYING WITH INTEGRAL DRIVER	
MOUNTING	CLUR03-OF-FMB-TRM-INTEGRAL-120-400-D1
LIGHT	CLURL03-TRM-SW-WRO-90-30-TMW-MF01
REMOTE DRIVER	N/A

## MOUNTING CLUR03-OF-FMB-TRM-REMOTE

<b>MOUNTING</b>	CLUR03-OF-FMB-TRM-REMOTE
<b>LIGHT</b>	CLURL03-TRM-SW-WRO-90-30-TMW-MF01
<b>REMOTE DRIVER</b>	Remote driver 1: RDB1-4X-CLUR03-120-250-RD1 Remote driver 2: RDB2-2X-CLUR03-120-250-RD1

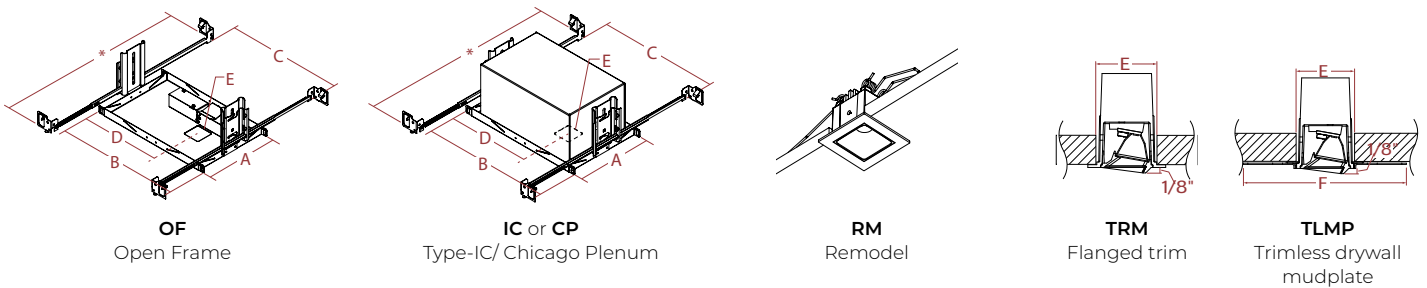
<sup>13</sup> When specifying with multiple remote driver boxes, each driver used needs to be on a separate line and be numbered for the ordering codes.

## MOUNTING

Cluster can be installed in a wide range of ceiling conditions and with various ceiling trim options. Spring clips clamp the lighting unit to the mounting frame (or directly to the ceiling for remodel). Maximum ceiling thickness is 1.25".

INSTALLATION TYPE	MOUNTING OPTION <sup>1,2</sup>	TRIM TYPE
<b>OF</b> - Open Frame Type Non-IC <b>IC</b> - Type-IC <b>RM</b> - Remodel Type Non-IC <b>CP</b> - Chicago Plenum Type-IC (CCEA)	<b>ASB</b> - Adjustable standard bar hangers <b>FMB</b> - Flush mount bars <b>ACB</b> - Adjustable commercial bar hangers <b>AHC</b> - Adjustable hat channel bars <b>NA</b> - Not applicable  <sup>1</sup> For detailed mounting option dimensions, see page 3. <sup>2</sup> Specify NA for remodel (RM) installation type.	<b>TRM</b> - Flanged trim <b>TLMP</b> - Trimless drywall mudplate <b>TLMW</b> - Trimless millwork

### INSTALLATION TYPE <sup>4</sup>



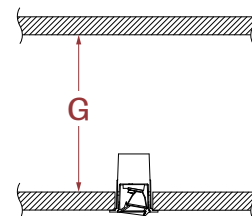
<sup>4</sup> Drawings shown with adjustable standard bar hangers.

	A HOUSING WIDTH	B HOUSING LENGTH	C SPACING BETWEEN BARS	D DISTANCE FROM CUT-OUT
<b>CLUR03</b>	8 9/16"	13 5/16"	12 3/4"	5 3/8"
<b>CLUR05</b>	8 9/16"	13 5/16"	12 3/4"	6 5/8"
<b>CLUR10</b>	10 1/16"	19 5/16"	18 3/4"	10 5/8"

E CUT-OUT DIMENSIONS	F MUDPLATE DIMENSIONS
4" x 1 9/16"	6 5/16" x 3 29/32"
6 3/8" x 1 9/16"	8 11/16" x 3 29/32"
12 3/8" x 1 9/16"	14 11/16" x 3 29/32"

### PLENUM CLEARANCE DIMENSIONS

	G PLENUM CLEARANCE HEIGHT			
	REMOTE & INTEGRAL		INTEGRAL	REMOTE
	OPEN FRAME	IC / CP	REMODEL	REMODEL
<b>CLUR03</b>	4 13/16"	5 3/8"	4 13/16"	2 5/32"
<b>CLUR05</b>	4 13/16"	5 3/8"	4"	2 5/32"
<b>CLUR10</b>	4 13/16"	5 3/8"	4"	2 5/32"

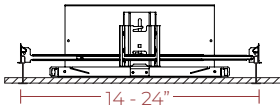


# CLUSTER

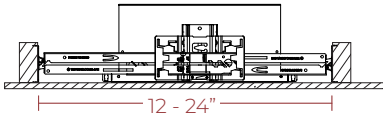
## RECESSED LINEAR WALL WASH

LUMENWERX

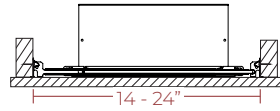
### MOUNTING OPTIONS



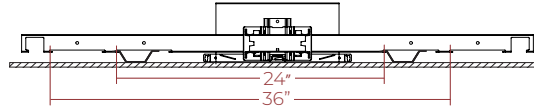
**ASB** - Adjustable standard bar hangers  
Grid ceiling or drywall with variable height  
(Commercial applications)



**ACB** - Adjustable commercial bar hangers  
Grid ceiling, drywall, metal, wood, frame mounting  
(Also openings for multiple hanging options such as hat channel, IC channel and metal tubing, supplied by others)



**FMB** - Flush mount bracket  
Drywall/metal/wood frame mounting  
(Residential applications)



**AHC** - Adjustable hat channel bars  
With adjustable height

### FIXTURE DIMENSIONS<sup>1</sup>

	BODY TYPE	
	TRM Flanged trim	TLMP Trimless drywall mudplate
CLURL03		
CLURL05		
CLURL10		

<sup>1</sup> Drawings shown with miniature reflector optics, but dimensions remain the same.

# CLUSTER

RECESSED LINEAR WALL WASH

# LUMENWERX

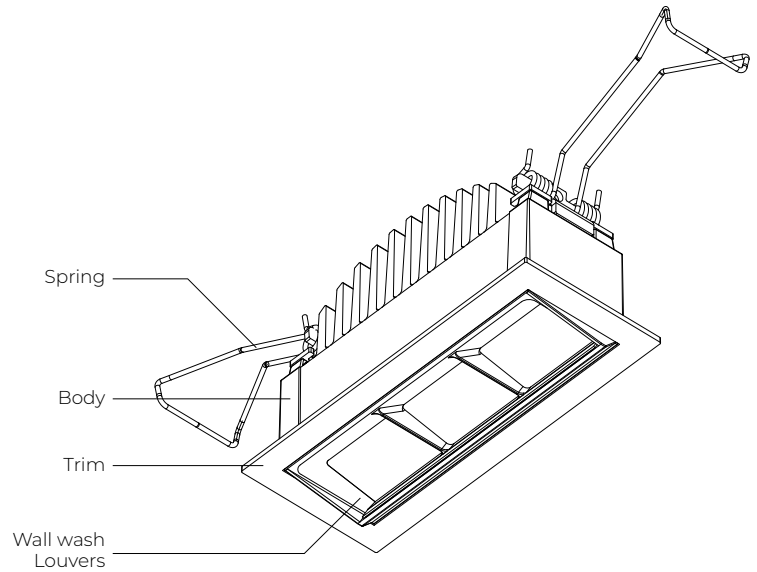
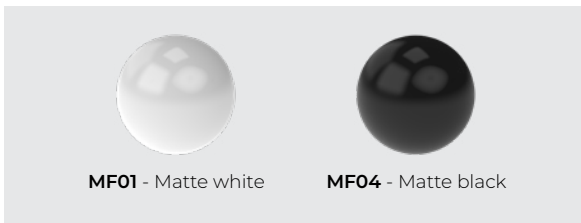
## LIGHT

### LOUVER SHAPE



### LOUVERS FINISH

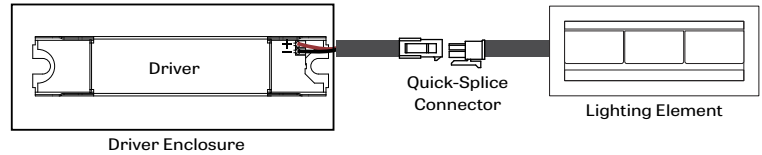
Louvers is injection molded with integral texture and color



## DRIVER

## INTEGRAL DRIVER

The integral driver is sized to the lighting unit and is connected directly to it with Class 2 wiring and quick-splice connectors. The driver enclosure can be serviced through the ceiling by removing the lighting unit.



## MULTIPLIER

## GENERAL LUMEN OUTPUT MULTIPLIER AT 90 CRI

	2700K	3000K	3500K	4000K
<b>LUMEN OUTPUT MULTIPLIER</b>	0.94	0.97	1	1.02

## LUMEN PACKAGE (AT 3500K, WRO) - INTEGRAL DRIVER

LUMINAIRE ID	LUMEN OUTPUT	WATTS	EFFICACY LM/W
<b>CLUR03</b>	400 lm	6.35 W	63 lm/W
<b>CLUR05</b>	800 lm	12.7 W	63 lm/W
<b>CLUR10</b>	1200 lm	18.2 W	66 lm/W

LUMEN PACKAGE	VOLTAGE	INTEGRAL DRIVER
Use the multiplier tables to calculate the lumen package	<b>120</b> - 120V <b>277</b> - 277V	<b>D1</b> - 1% 0-10V <b>ELV</b> <sup>1</sup> - ELV 120V <b>TRI</b> <sup>1</sup> - TRIAC 120V <sup>1</sup> Available with 120V only.

## REMOTE DRIVER

The remote driver can power several lighting units, depending on their total power. The minimum and maximum number of lighting units and driver type are shown in the table below and must be observed. The remote driver and lighting units are wired together through connection boxes, which are furnished pre-wired to the driver enclosure. All wiring is Class 2 with quick-splice connectors. The remote driver requires access from above the ceiling (or an access panel).

LUMEN PACKAGE<sup>1</sup> (AT 3500K, WRO) - REMOTE DRIVER

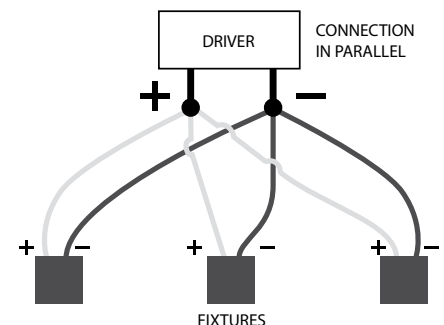
LUMINAIRE ID	LUMEN PACKAGE <sup>2</sup>			VOLTAGE	REMOTE DRIVER	NUMBER OF LIGHTING UNITS PER DRIVER
<b>CLUR03</b> <b>CLUR05</b> <b>CLUR10</b>	<b>LOW</b> 100 lm 200 lm 300 lm	<b>MEDIUM</b> 250 lm 500 lm 750 lm	<b>HIGH</b> 400 lm 800 lm 1200 lm	<b>120</b> - 120V <b>277</b> - 277V <b>UNV</b> - 120V-277V	<b>RD1</b> - 1% 0-10V <b>RELV</b> <sup>3</sup> - ELV 120V <b>RTRI</b> <sup>3</sup> - TRIAC 120V <b>RDA</b> <sup>4</sup> - DALI <b>RLTEA2W</b> <sup>3</sup> - Lutron 1% - 2 wire FP 120V <b>RLDE1</b> <sup>4</sup> - Lutron Hi-lume 1% Eco <sup>3</sup> Available with 120V only. <sup>4</sup> On-site commissioning is required.	See table below for maximum and minimum possible number of lighting units per each driver.  For configurations involving different cluster sizes, please consult factory.

<sup>1</sup> Watts and lumen per watts will vary based on the number of lighting units per remote driver as well as on the type of driver selected.

## NUMBER OF LIGHTING UNITS PER DRIVER - MINIMUM AND MAXIMUM

DRIVER TYPE	CLUR03	CLUR05	CLUR10
<b>D1</b> - 1% 0-10V	<b>2-12</b>	<b>1-6</b>	<b>1-3</b>
<b>ELV</b> - ELV 120V	<b>1-4</b>	<b>1</b>	<b>1</b>
<b>TRI</b> - TRIAC 120V	<b>1-4</b>	<b>1</b>	<b>1</b>
<b>DA</b> - DALI	<b>3-12</b>	<b>2-6</b>	<b>1-3</b>
<b>LTEA2W</b> - Lutron 1% - 2 wire FP 120V	<b>2-6</b>	<b>1-3</b>	<b>1-2</b>
<b>LDE1</b> - Lutron Hi-lume 1% Eco	<b>2-11</b>	<b>1-6</b>	<b>1-4</b>

For any quantities of lighting units per driver that fall outside the minimum and maximum listed above, please consult factory.

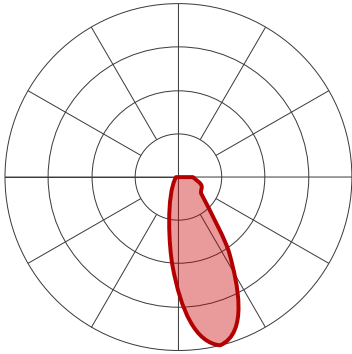


# CLUSTER

## RECESSED LINEAR WALL WASH

LUMENWERX

### WALL WASH



### VERTICAL ILLUMINANCE

CLU03C-WW-SB-LED-90-400LMS-35				
FC on Wall				
Distance from Ceiling	1'	20	19	20
	2'	24	24	24
	3'	24	24	24
	4'	19	19	19
	5'	14	14	14
	6'	10	10	10
	7'	9	9	9
	8'	7	7	7

CLU05C-WW-SB-LED-90-800LMS-35				
FC on Wall				
Distance from Ceiling	1'	40	38	40
	2'	48	48	48
	3'	48	48	48
	4'	37	37	37
	5'	28	28	28
	6'	21	21	21
	7'	17	17	17
	8'	15	14	15

CLU10C-WW-SB-LED-90-1200LMS-35				
FC on Wall				
Distance from Ceiling	1'	59	57	59
	2'	72	71	72
	3'	71	71	71
	4'	55	55	55
	5'	40	40	40
	6'	30	30	30
	7'	24	24	24
	8'	20	20	20

CLU03C-WW-SB-LED-90-400LMS-35				
FC on Wall				
Distance from Ceiling	1'	10	9	10
	2'	11	11	11
	3'	13	12	13
	4'	12	12	12
	5'	10	10	10
	6'	8	8	8
	7'	6	6	6
	8'	5	5	5

CLU05C-WW-SB-LED-90-800LMS-35				
FC on Wall				
Distance from Ceiling	1'	21	17	21
	2'	23	21	23
	3'	25	25	25
	4'	24	24	24
	5'	20	20	20
	6'	15	16	15
	7'	12	12	12
	8'	11	11	11

CLU10C-WW-SB-LED-90-1200LMS-35				
FC on Wall				
Distance from Ceiling	1'	31	26	31
	2'	34	32	34
	3'	38	37	38
	4'	36	35	36
	5'	29	29	29
	6'	23	23	23
	7'	19	19	19
	8'	16	16	16

CLU03C-WW-SB-LED-90-400LMS-35				
FC on Wall				
Distance from Ceiling	1'	8	7	8
	2'	9	8	9
	3'	10	10	10
	4'	10	10	10
	5'	10	10	10
	6'	8	8	8
	7'	7	7	7
	8'	6	6	6

CLU05C-WW-SB-LED-90-800LMS-35				
FC on Wall				
Distance from Ceiling	1'	16	15	16
	2'	17	17	17
	3'	19	19	19
	4'	20	20	20
	5'	19	19	19
	6'	17	17	17
	7'	14	14	14
	8'	12	12	12

CLU10C-WW-SB-LED-90-1200LMS-35				
FC on Wall				
Distance from Ceiling	1'	24	22	24
	2'	26	25	26
	3'	29	28	29
	4'	31	31	31
	5'	29	29	29
	6'	25	25	25
	7'	21	21	21
	8'	18	18	18

# CLUSTER

## RECESSED LINEAR WALL WASH

# LUMENWERX

## Technical Specifications

### OPTICS

#### WALL WASH REFLECTOR OPTICS (WRO)

Cluster Linear Wall Wash optics use multiple mid-flux emitters in a continuous array, supported by an angled board. An aluminum reflector collects and redirects emitter flux, while a refractive film adjusts both vertical and horizontal intensity and eliminates source image. The result is excellent uniformity up and down the wall, as well as between luminaires.

### LIGHT SOURCE

Custom array of high-flux LEDs mounted onto aluminum-backed circuitry. Available in 2700K, 3000K, 3500K and 4000K with a minimum 90 CRI with elevated R9 value. Color consistency is maintained to within 3 SDCM. All LEDs have been tested in accordance with IESNA LM-80-08 and the results have shown L80 lumen maintenance greater than 60,000 hours. Absolute product photometry is measured and presented in accordance with IESNA LM-79, unless otherwise indicated.

### WEIGHT

	BODY		OPEN FRAME		TYPE-IC WITH CHICAGO PLENUM	
	Lb	Kg	Lb	Kg	Lb	Kg
CLUR03	0.70	0.30	2.30	1.04	5.34	2.42
CLUR05	1.10	0.50	2.50	1.13	5.35	2.43
CLUR10	2.00	0.90	3.49	1.58	7.99	3.62

### CONSTRUCTION

**Housing** - Die-cast aluminum (0.95" nominal)

**Optics** - Polycarbonate

**Mounting frame** - 22 gauge galvanized sheet metal

**Driver housing** - 18 gauge galvanized sheet

**Mounting clips** - Ø1.0-1.4mm spring clips

### CERTIFICATIONS

**ETL** - Rated for indoor dry/damp locations.

Conforms to ANSI/UL Std. 1598 and certified to CAN/CSA Std. C22.2 No. 250.0

**Chicago plenum** - City of Chicago approved (CCEA) when specified with CP installation type option.

**IC rated** - Suitable for direct contact with insulation when specified with IC or CP installation type options.

### WARRANTY

Lumenwerx provides a five-year limited warranty on electrical and mechanical performance of the luminaires, including the LED boards, drivers, and auxiliary electronics. Lumenwerx will repair or replace defective luminaires or components at our discretion, provided they have been installed and operated in accordance with our specifications. Other limitations apply, please refer to the full warranty on our website.