

MD3-4200

LED - Recessed Medical Patient Ambient/Exam/Reading Luminaire

Project:	Catalog:	Type:
Notes:		

Product Description

These linear slots are a simple way to provide excellent vertical illumination and an elegant lighting solution. Installed in pairs, they offer both exam and ambient outputs. It also provides a third reading source from small diffuse apertures aptly positioned for the reading task. In addition, you can choose an integrated low voltage controller located within the primary fixture. These fixtures offer simplified wiring by directly controlling the satellite fixture, giving you one fixture to connect to building and bed control wiring. Amber or white night light options give staff low-level lighting for overnight tasks without disturbing the patient.

Features

- High hiding diffuse frosted lens
- Asymmetric Exam optics
- Separate CCT & CRI for Exam & Ambient mode
- Designed for use in pairs

Options

- Anti-microbial finish
- Tunable White
- BIOS® SkyBlue®
- Prewired Whip option simplifies installation
- Integral dimming low voltage controller options
- Night light in Amber or White

Housing

20-gauge precision formed cold rolled steel. Welded construction with integral flanges for grid interface.

Door Frame

20-gauge precision formed one-piece cold rolled steel with welded corners. Flush Philips head countersunk stainless steel screws. (White color-matched screws optionally available). Hinged to housing by (2) stainless steel safety cable tethers.

Lens & Lens Retention

Acrylic, 0.080" thick translucent-diffuse white secured and sealed to inner surface of door. Other options including polycarbonate are available.

Optic Systems

Ambient: Symmetric distribution from a centered LED array.

Exam: Die formed reflector and LED arrangement produce distinct left and right asymmetric distributions.

Reading: COB LED array and 50mm elliptical reflector and shielded diffuser located at head end of doorframe. Controlled by an independent dimmable drivers.

LED

LED board modules are high efficiency and closely regulated to maintain CRI, color consistency, lumen performance, and efficacy. Select from 3000K, 3500K, 4000K, and 5000K color temperatures with a color consistency of 3 SDCM, standard 80 CRI, optional 90 CRI. Tunable White CCT range is 2700-6500K. Lifetime L70 is greater than 60,000 hrs. Modules are field replaceable and commercially available. Tunable White and Bios SkyBlue® options are also available.

Electrical

The standard electronic driver is constant current, programmable and dimmable to 1% using a 0-10V protocol. High efficiency (>85%) and low THD (<10%). Certified to FCC Part 15, Class A. 120-277Vac or 347Vac, 50/60hz. See "Options" for Lutron™ or DALI driver choices. Optional low voltage controller available for pillow switch operation (pillow switch by others).

Finish

Matte architectural white polyester powder coat finish using a 5-stage pretreatment. Anti-microbial matte white optional (F36). Reflectors are high reflectance white polyester powder coated.

Installation

Grid Mount - Integral T-grid clip with seismic support holes for attachment to building structure. Optional yoke mounting brackets available for flanged / drywall mounting.

Listings, Certifications and Ratings

ETL Damp Locations (See options for IP65 construction).

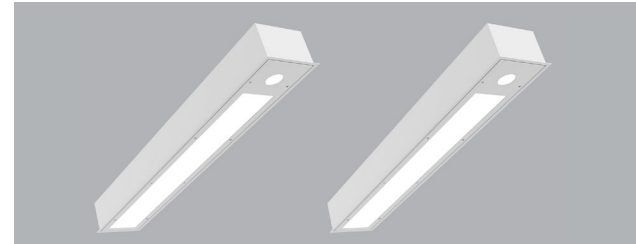
Warranty

5 year limited warranty. For complete warranty, click here:



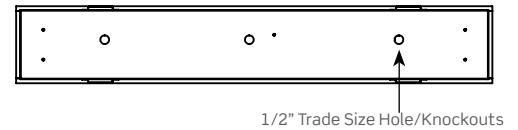
Approvals

- ETL Damp Locations
- IP65 (Optional)

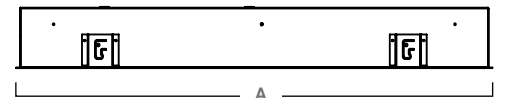


Dimensions

Top View



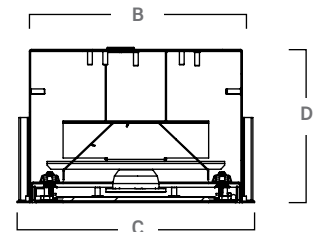
Side View



Bottom View



Cross Section View



	Dimensions (inch) & Weights			
	A	B	C	D
48	47.75"	6.96"	7.75"	5.00"

Consult installation guide for exact dimensions.

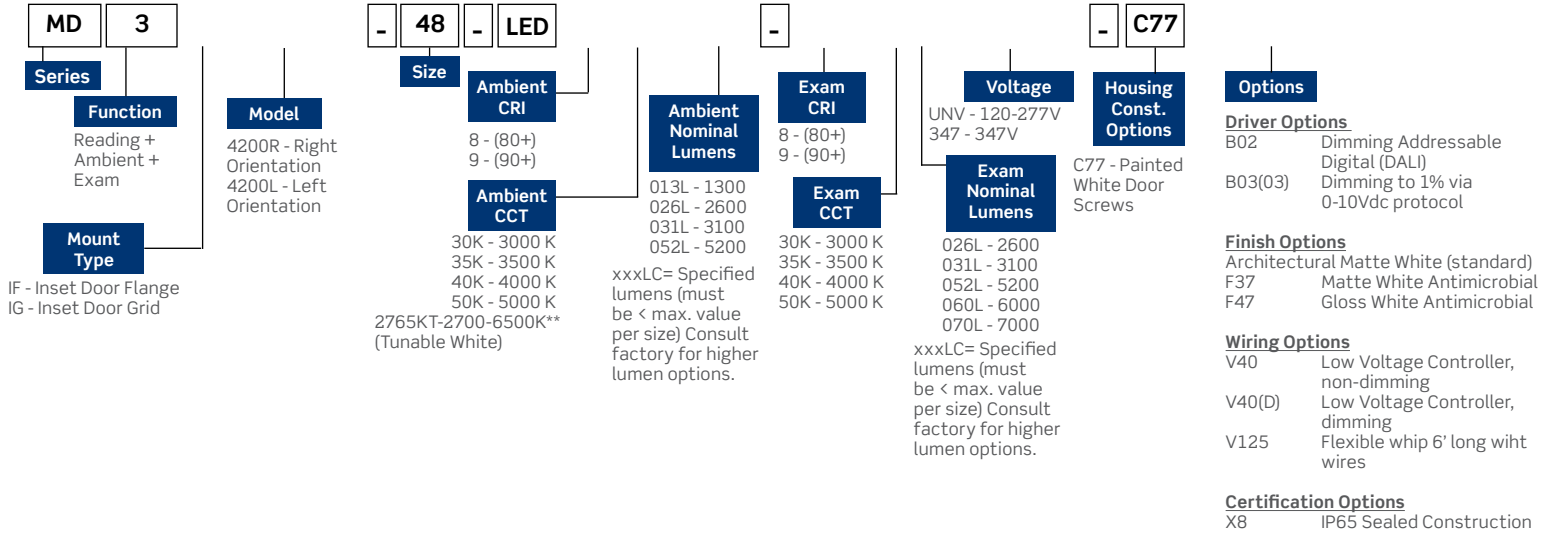
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LED - Recessed Medical Patient Ambient/Exam/Reading Luminaire

Project:	Catalog:	Type:
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Order Key

EXAMPLE: MD3IF4200R-48-LED830K034L-940K055LUNV



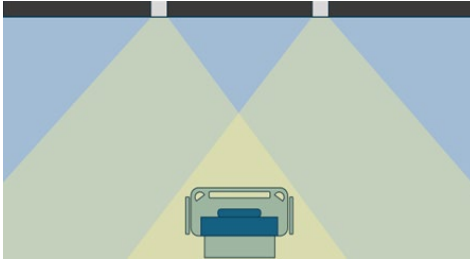
** When Selecting 2765KT, if a tunable white-compatible control is not selected the luminaire will come standard with two sets of 0-10V wires for dimming and color tuning. For compatible control options please consult factory.

Performance Data													
Size	Function	Lumen Order Code	Delivered Lumens (827K)	Delivered Lumens (830K)	Delivered Lumens (930K)	Delivered Lumens (835K)	Delivered Lumens (935K)	Delivered Lumens (840K)	Delivered Lumens (940K)	Delivered Lumens (850K)	Estimated L80 LED Life (hrs)	Supply Watts	Efficacy
			80 CRI	80 CRI	90CRI	80 CRI	90 CRI	80 CRI	90 CRI	80 CRI			
MD3IF4200R-48 (48")	Ambient	013L	1213	1239	1068	1265	1094	1318	1147	1371	>90Khrs	13.0	101.4
		026L	1500	2479	2136	2532	2189	2637	2294	2742	>90Khrs	25.0	105.5
		031L	2000	2913	2510	2975	2572	3099	2696	3223	>90Khrs	35.0	88.5
		052L	2500	2350	2025	2400	2075	2500	2175	2600	>80Khrs	26.9	92.9
	Exam	026L	2554	2609	2249	2665	2304	2776	2415	2887	>90Khrs	28.3	98.1
		031L	2889	2952	2543	3014	2606	3140	2732	3266	>90Khrs	35.0	82.5
		052L	4778	4882	4207	4986	4311	5193	4518	5401	>90Khrs	49.4	96.8
		060L	5517	5637	4858	5757	4978	5997	5217	6237	>80Khrs	56.1	98.3
		070L	6371	6509	5609	6648	5748	6925	6025	7202	>80Khrs	66.2	96.2
	All On (Ambient + Exam)	013L + 026L	3766	3848	3316	3930	3398	4094	3562	4258	>90Khrs	41.3	99.1
		026L + 026L	4980	5088	4385	5196	4493	5413	4709	5630	>90Khrs	53.3	93.4
		026L + 031L	5315	5430	4679	5546	4795	5777	5026	6008	>90Khrs	60.0	88.6
		026L + 052L	7204	7361	6343	7517	6499	7830	6812	8144	>90Khrs	74.4	96.9
		026L + 060L	7943	8116	6994	8289	7166	8634	7512	8979	>80Khrs	81.1	97.9
		026L + 070L	8797	8988	7745	9179	7936	9562	8319	9944	>80Khrs	91.2	96.5
		031L + 031L	5740	5865	5054	5989	5178	6239	5428	6489	>90Khrs	70.0	82.0
031L + 052L		7629	7795	6717	7961	6883	8292	7214	8624	>90Khrs	84.4	90.4	
031L + 060L	8368	8550	7368	8732	7550	9096	7914	9460	>80Khrs	91.1	91.9		
031L + 070L	9222	9423	8119	9623	8320	10024	8721	10425	>80Khrs	101.2	91.1		

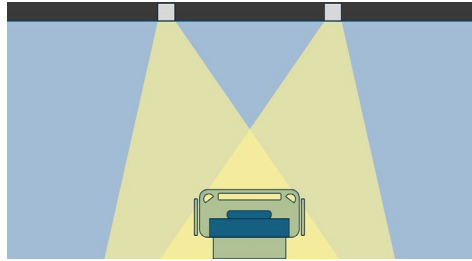
See Lumen Multipliers below for other CCT or CRI performance data.

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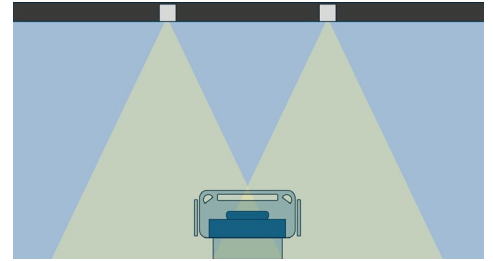
Optical Performance



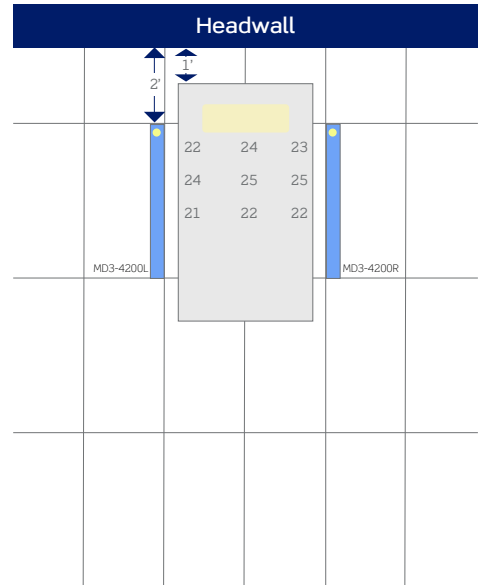
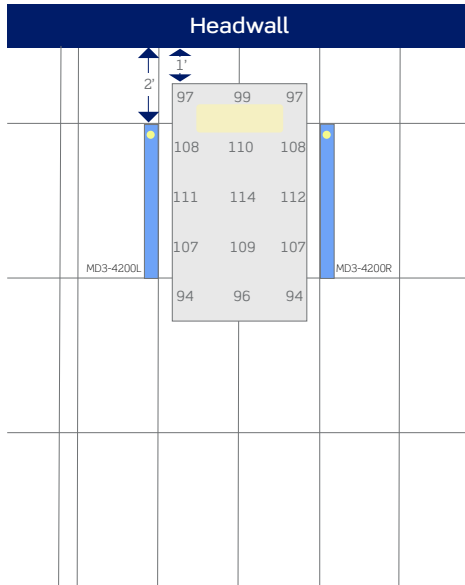
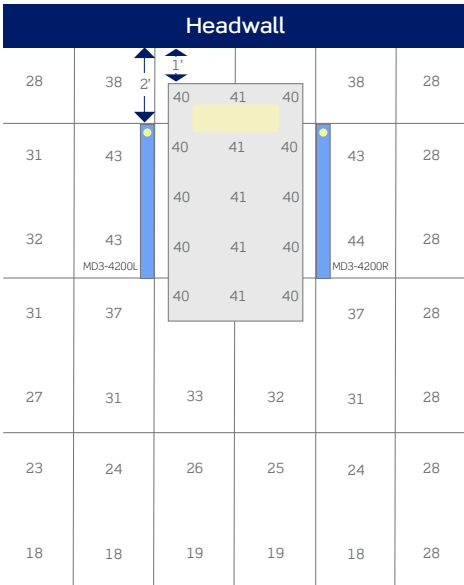
Ambient Mode Illumination



Exam Mode Illumination



Reading Mode Illumination



Mode	Order Code	Maximum	Average	Avg/Min Ratio
Ambient	026L	47	29	3.2
Exam	060L	114	104	1.1
Reading	-	25	23	1.1
Night Observation	V39	6	5	1.6

Based on MD3iG-4200(x)-48-LED840K026L-840K060LUNV

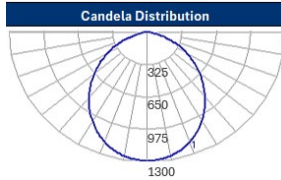
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LED - Recessed Medical Patient Ambient/Exam/Reading Luminaire

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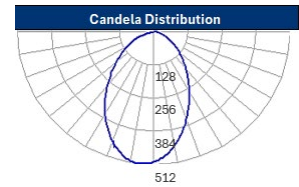
MD3iG-4200(x)-48-LED840K030L (Ambient Mode)

Characteristics	
Ambient Lumens	2969
Efficacy Rating	87
Total Luminaire Watts	34
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.12
Spacing Criterion (Daigonal)	1.26



MD3iG-4200(R)-48-LED840K (Reading Mode - Right)

Characteristics	
Ambient Lumens	859
Efficacy Rating	63
Total Luminaire Watts	14
Spacing Criterion (0-180)	0.88
Spacing Criterion (90-270)	1.00
Spacing Criterion (Daigonal)	1.08



Luminance Data (cd/sq.m)			
Degrees	0-Deg	45-Deg	90-Deg
45	7291	6681	6178
55	6498	5793	5256
65	5369	4711	4220
75	3466	3135	2779
85	660	1326	1185

Zonal Lumens Summary		
Zone	Lumens	%Fixt
0-30	959	32.3
0-40	1522	51.3
0-60	2506	84.4
0-80	2942	99.1
0-90	2969	100

Luminance Data (cd/sq.m)			
Degrees	0-Deg	45-Deg	90-Deg
45	1530	1615	1821
55	1219	1289	1456
65	934	989	1109
75	590	618	675
85	204	239	210

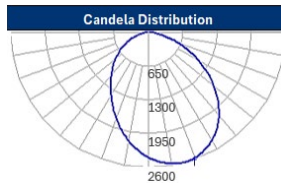
Zonal Lumens Summary		
Zone	Lumens	%Fixt
0-30	3548	39.1
0-40	503	58.6
0-60	758	88.3
0-80	854	99.5
0-90	859	100

*Photometry based on 80CRI and 4000K CCT

*Photometry based on 80CRI and 4000K CCT

MD3iG-4200(L)-48-LED840K-xxx-060L (Exam Only Mode - Left)

Characteristics	
Ambient Lumens	5997
Efficacy Rating	92
Total Luminaire Watts	65
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	0.92
Spacing Criterion (Daigonal)	1.30



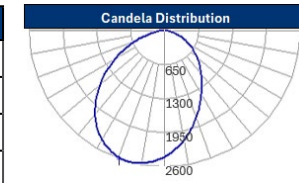
Luminance Data (cd/sq.m)			
Degrees	0-Deg	45-Deg	90-Deg
45	14164	10520	9349
55	12796	9302	8244
65	10706	7759	6847
75	7002	5275	4641
85	1344	2338	2117

Zonal Lumens Summary		
Zone	Lumens	%Fixt
0-30	1832	30.6
0-40	2947	49.2
0-60	4988	83.2
0-80	5936	99.0
0-90	5997	100.0

*Photometry based on 80CRI and 4000K CCT

MD3iG-4200(R)-48-LED840K-xxx-060L (Exam Only Mode - Right)

Characteristics	
Ambient Lumens	5997
Efficacy Rating	92
Total Luminaire Watts	65
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	0.92
Spacing Criterion (Daigonal)	1.30



Luminance Data (cd/sq.m)			
Degrees	0-Deg	45-Deg	90-Deg
45	14164	10520	9349
55	12796	9302	8244
65	10706	7759	6847
75	7002	5275	4641
85	1344	2338	2117

Zonal Lumens Summary		
Zone	Lumens	%Fixt
0-30	1832	30.6
0-40	2947	49.2
0-60	4988	83.2
0-80	5936	99.0
0-90	5997	100.0

*Photometry based on 80CRI and 4000K CCT

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Notes:		

Integrated Controls Options
Three Function with Dimming - V40(D)

Three Function Patient Room Luminaire with Reading Ambient and Exam Functions						
Function/Action	First Press (< 0.5 seconds)	Second Subsequent sustained press (> 0.5 seconds)	Third subsequent sustained press (> 0.5 seconds)	Each successive sustained press (> 0.5 seconds)	Subsequent quick press (< 0.5 seconds)	LVC Load/Switch Number
Ambient	On at 25%	Smooth increasing brightness up to 100% over 4 seconds. Release at any point latches at that intensity level.	Smooth decreasing brightness down to 10% over 5 seconds. Release at any point latches at that intensity level.	Reverses direction of dimming between 10% and 100% over 5 seconds. Release at any point latches at that intensity level.	Off	1
Reading	On at 25%	Smooth increasing brightness up to 100% over 4 seconds. Release at any point latches at that intensity level.	Smooth decreasing brightness down to 10% over 5 seconds. Release at any point latches at that intensity level.	Reverses direction of dimming between 10% and 100% over 5 seconds. Release at any point latches at that intensity level.	Off	2
Exam	On at 100%	Off	Toggle, on at 100% and off			3

* Night observation light is separately wired and controlled by line voltage switch typically installed along the path of egress.

