

MINIMO PRO WARM DIM - NORTH AMERICA



PRODUCT OVERVIEW

WARM DIM LIGHT ENGINE



OVERVIEW

Minimo Pro Warm Dim - North America is a Constant Current single source pro-series downlight with with dim-to-warm ranges of 3000K to 1800K and 2700K to 1800K and comes as standard in white and black along with a range of premium finishes. It has four site-changeable optics for flexible beam distribution and is fully adjustable with 360° pan and 35° tilt without breaking the ceiling line. Our 878lm | 12.60W light engine has a max peak intensity of 3306cd. The integral accessory holder can accommodate 32mm lenses and louvers.

PERFORMANCE

	Warm Dim			
	Medium	Wide	V. Wide	U. Wide
FWHM	25°	30°	40°	50°
Luminous Flux	878 lm	865 lm	867 lm	755 lm
Peak Intensity	3306 cd	2657 cd	1804 cd	1005 cd
CCT	1800-2700K 1800-3000K			
CRI Min.	94 94			
LED Current	0.350 A			
Voltage	36 V			
Input Wattage	12.6 W			
Efficacy	69.7 lm/W			
Driver Type	Constant Current Remote			
Class	SELV Class III			

*Performance table shows light engine characteristics, driver input voltage 120V or 120-277V AC

ORDER CODE

Model	Type	Trim	Aperture	Output	CCT	Beam Angle	Trim Finish	Aperture Finish
MNPNA <i>Minimo Pro</i>	D <i>Fixed</i>	TR <i>Trimmed</i>	FP <i>Pinhole</i> ³	WDSO <i>Warm Dim</i>	18K27K <i>1800K-2700K</i>	ME <i>Medium 25°</i>	NA <i>Trimless</i>	WH <i>White</i>
	A <i>Adjustable</i>	TL <i>Trimless</i> ¹	BV <i>Beveled</i> ²		18K30K <i>1800K-3000K</i>	WD <i>Wide 30°</i>	WH <i>White</i>	BK <i>Black</i>
						VW <i>Very Wide 40°</i>	BK <i>Black</i>	MG <i>Matt Gold</i>
						UW <i>Ultra Wide 50°</i>	AL <i>Br. Aluminium</i>	
							RBZ <i>R. Bronze</i>	
							BR <i>Br. Brass</i>	
							PB <i>P. Brass</i>	
							CH <i>Chrome</i>	

Example code: MNPNA-D-TR-FP-WDSO-18K27K-ME-WH-WH

¹ Trimless trim finish must be NA ² MG Aperture finish only for beveled ³ Pinhole trim finishes only WH/BK/NA

Housing	Model	Trim	Output	Control	Integral
HIC <i>Housing, IC Rated</i>	MNPNA <i>Minimo Pro</i>	TR <i>Trimmed</i> ³	WDSO <i>Warm Dim</i> ¹	UNV <i>Phase/0-10V 1% Dimming</i> ²	
HCP <i>Housing, IC Rated Chicago Pl</i>		TL <i>Trimless</i> ³		PHSD <i>Forward/Reverse Phase</i>	Remote
HP <i>New Construction Pan (Non-IC)</i>				010G <i>0-10V Log Dimming</i>	
HRM <i>Remote Driver (Non-IC)</i>				DALI <i>DALI-2 Dimming</i>	
				DMX <i>DMX</i>	

Example code: HIC-MNPNA-TR-WDSO-UNV

¹ A driver configuration must always be included with this product, it requires 1 driver per light ² Integral UNV is only available with HIC/HCP ³ Trim and Output must match luminaire configuration
See Drivers, Power Supplies and Accessories sections for further order codes

LIGHT ENGINE SELECTION

This product specification sheet references our Warm Dim light engine, for Tunable White please refer to its separate specification sheet.

warmDIM

Utilises fixture-integrated electronics that warms the colour temperature of the light as it dims; combining the beauty of Halgoen with the efficacy of LEDs.

- Halogen like CCT dimming curve
- Dims to 1800K

LIFETIME & ENVIRONMENTAL

At Precision, we design and engineer our products with longevity in mind. Many of the components that make up our light fixtures are both modular and re-usable, making it possible to service and repair them throughout their life in service. Once our products reach the end of their useful life, it is possible to re-work and renew them in to a new product. We prioritise the use of recyclable materials in both our products and packaging, and encourage our customers to engage responsibly in the correct disposal of any materials we supply.

CIBSE TM65	13.09 Kg/CO2e
CIBSE TM66	2.2
RoHS Compliance	Yes
REACH Compliance	Yes
WEEE Compliance	Yes - Registered Producer
Declare	LBC Red List Approved
Lifetime	L90B10 50,000hrs
Warranty	5 Years

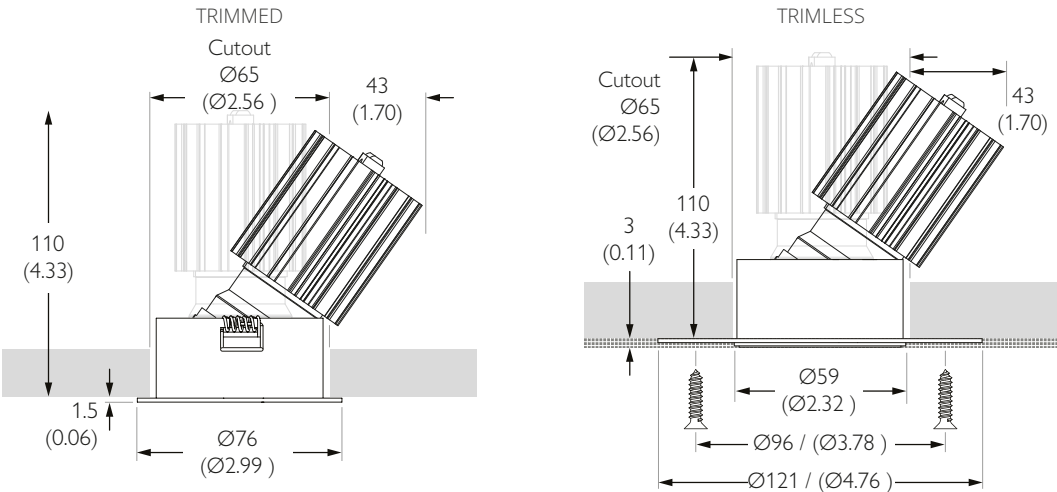
UK PART L	
Part L1A / L1B (Dwellings)	Compliant 117 lm/W
≥75 Lm/W source lumens	Source lm (1474 lm) / Source W (12.60 W)
Part L2A (General)	-
≥95Lm/W delivered lumens	
Part L2A (Display)	Compliant 117 lm/W
≥80 Lm/W source lumens	Source lm (1474 lm) / Source W (12.60 W)

MINIMO PRO WARM DIM - NORTH AMERICA

DIMENSIONS & FINISHES

WARM DIM LIGHT ENGINE

DIMENSIONS - LUMINAIRE

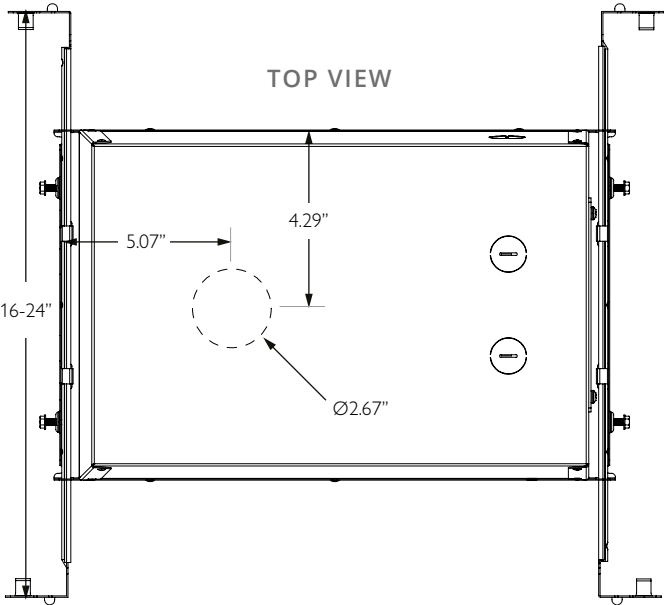
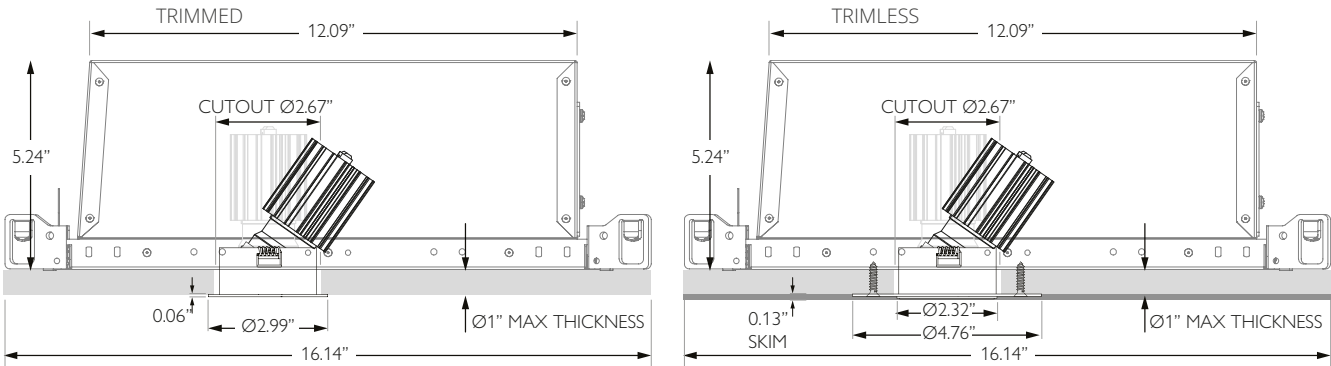


*Non-IC remodel recessed install with remote driver

MECHANICAL

Location	IP20 Indoor Dry / Damp Location Only	Cutout	$\varnothing 65\text{mm}$ (2.56")
Mounting	Recessed	Ceiling Thickness	3-25mm (0.12-0.98")
Adjustability	360 Pan 35 Tilt	Product Class	SELV Class III
Lockable	N/A	Material	Machined AL 6063-T6
Accessories	Louver Lenses	Weight	Luminaire 249g 0.55lb Housing 2553g 5.63lb

DIMENSIONS - IC HOUSING (HIC / HCP)



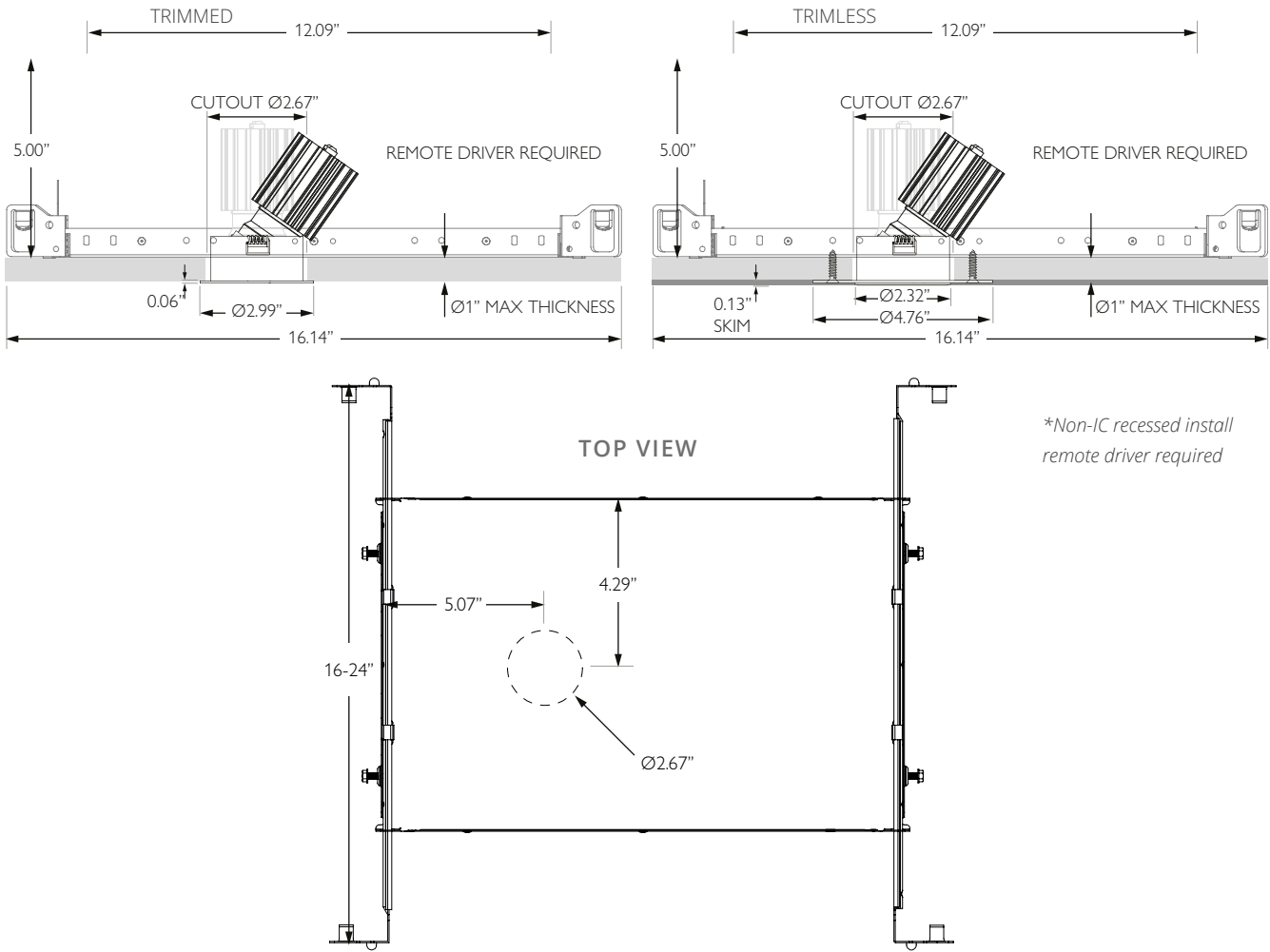
*IC recessed install with integral or remote driver

MINIMO PRO WARM DIM - NORTH AMERICA

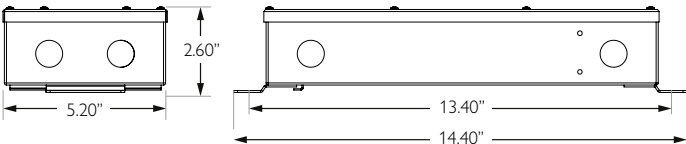
DIMENSIONS & FINISHES

WARM DIM LIGHT ENGINE

DIMENSIONS - NEW CONSTRUCTION PAN NON-IC (HP)



DIMENSIONS - REMOTE DRIVER (HIC / HCP / HP / HRM)



MINIMO PRO WARM DIM - NORTH AMERICA

DIMENSIONS & FINISHES

WARM DIM LIGHT ENGINE

TRIM & APERTURE TYPES



TRIMMED
PINHOLE



TRIMLESS
PINHOLE



TRIMMED
BEVELED

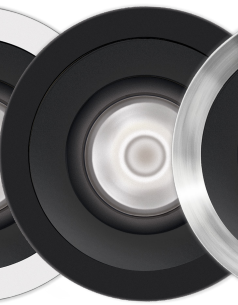


TRIMLESS
BEVELED

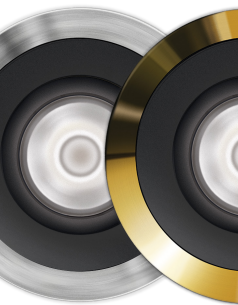
TRIM FINISHES



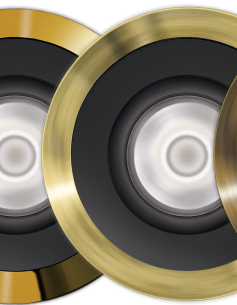
WHITE



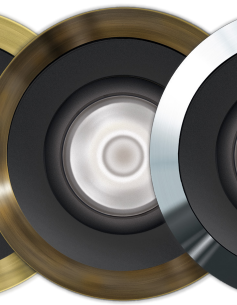
BLACK



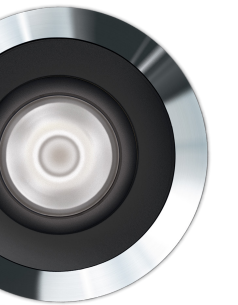
BRUSHED
ALUMINUM



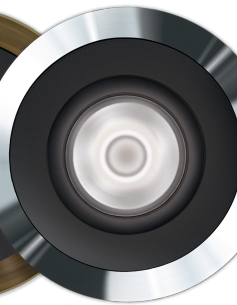
POLISHED
BRASS



BRUSHED
BRASS



RUBBED
BRONZE



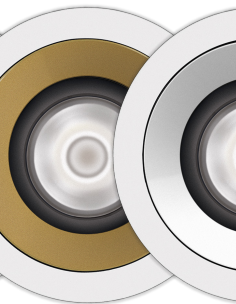
POLISHED
CHROME

APERTURE FINISHES

BEVELED



BLACK



MATTE GOLD



WHITE

PINHOLE



WHITE



BLACK

MINIMO PRO WARM DIM - NORTH AMERICA



DRIVERS & POWER SUPPLIES - NORTH AMERICA

WARM DIM LIGHT ENGINE

30W | 0-10V | Remote | Constant Current

Input Voltage	120-277V 50/60 Hz
Driver Type	Remote Constant Current
Location	IP20 Indoor Location Only
Dimming Control	0-10V
Min. Dim Level	0.1%
Flicker	IEEE P1789 Compatible No Observable Effect
Wiring Distance	16 AWG - 36m (118') 18 AWG 22m (72')



	HIC	HCP	HP	HRM		L	W	H
Max. Lights	1 only	1 only	1 only	1 only	mm	318	130	61
Order Code	HIC-MNPNA-aa-WDSO-010G	HCP-MNPNA-aa-WDSO-010G	HP-MNPNA-aa-WDSO-010G	HRM-MNPNA-aa-WDSO-010G	in	12.52	5.12	2.4

Replace aa with Trim type.

30W | DALI-2 | Remote | Constant Current

Input Voltage	120-277V 50/60 Hz
Driver Type	Remote Constant Current
Location	IP20 Indoor Location Only
Dimming Control	DALI-2
Min. Dim Level	0.1%
Flicker	IEEE P1789 Compatible No Observable Effect
Wiring Distance	16 AWG - 36m (118') 18 AWG 22m (72')

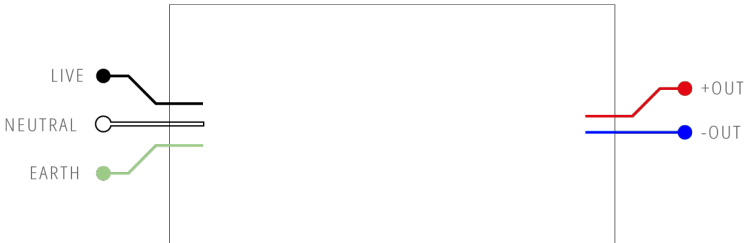


	HIC	HCP	HP	HRM		L	W	H
Max. Lights	1 only	1 only	1 only	1 only	mm	318	130	61
Order Code	HIC-MNPNA-aa-WDSO-DALI	HCP-MNPNA-aa-WDSO-DALI	HP-MNPNA-aa-WDSO-DALI	HRM-MNPNA-aa-WDSO-DALI	in	12.52	5.12	2.4

Replace aa with Trim type.

30W | Phase | Remote | Constant Current

Input Voltage	120V 50/60 Hz
Driver Type	Remote Constant Current
Location	IP20 Indoor Location Only
Dimming Control	Phase
Min. Dim Level	1.0%
Flicker	IEEE P1789 Compatible No Observable Effect
Wiring Distance	16 AWG - 14m (46') 18 AWG 9m (30')



	HIC	HCP	HP	HRM		L	W	H
Max. Lights	1 only	1 only	1 only	1 only	mm	318	130	61
Order Code	HIC-MNPNA-aa-WDSO-PHSD	HCP-MNPNA-aa-WDSO-PHSD	HP-MNPNA-aa-WDSO-PHSD	HRM-MNPNA-aa-WDSO-PHSD	in	12.52	5.12	2.4

Replace aa with Trim type.

MINIMO PRO WARM DIM - NORTH AMERICA

PHOTOMETRY

WARM DIM LIGHT ENGINE

OUTPUT SCALING

CCT	Output Multiplier	CRI	R9 Typ.	TM-30: Rf	TM-30: Rg	Max Lm
1800K	0.10	95	69	90	104	88
2100K	0.70	96	82	89	108	615
2400K	0.80	96	85	91	106	702
2700K	0.90	94	85	90	101	790
3000K	1.00	94	85	90	101	878

Colour Consistency: 3 SDCM at max CCT

PHOTOMETRY

MEDIUM FWHM 25° Delivered Flux 878 lm Peak Intensity 3306 cd		Cd: 0 558 1117 1675 2233 2792 3350 10° 20° 30° 40° 90° 80° 70° 60° 50° 40°	0.44m 1m 0.89m 2m 1.33m 3m 1.77m 4m 2.22m 5m 3306lx 827lx 367lx 207lx 132lx 367fc 92fc 41fc 23fc 15fc 10fc 1.3' 2.7' 4.0' 5.3' 6.7' 8.0' 18'
WIDE FWHM 30° Delivered Flux 865 lm Peak Intensity 2657 cd		Cd: 0 450 900 1350 1800 2250 2700 10° 20° 30° 40° 90° 80° 70° 60° 50° 40°	0.54m 1m 1.07m 2m 1.61m 3m 2.14m 4m 2.68m 5m 2657lx 664lx 295lx 166lx 106lx 295fc 74fc 33fc 18fc 12fc 8fc 1.6' 3.2' 4.8' 6.4' 8.0' 9.6' 18'
VERY WIDE FWHM 40° Delivered Flux 867 lm Peak Intensity 1804 cd		Cd: 0 308 617 925 1233 1542 1850 10° 20° 30° 40° 90° 80° 70° 60° 50° 40°	0.73m 1m 1.46m 2m 2.18m 3m 2.91m 4m 3.64m 5m 1804lx 451lx 200lx 113lx 72lx 200fc 50fc 22fc 13fc 8fc 6fc 2.2' 4.4' 6.6' 8.7' 10.9' 13.1' 18'
ULTRA WIDE FWHM 50° Delivered Flux 755 lm Peak Intensity 1005 cd		Cd: 0 175 350 525 700 875 1050 10° 20° 30° 40° 90° 80° 70° 60° 50° 40°	0.93m 1m 1.87m 2m 2.80m 3m 3.73m 4m 4.66m 5m 1005lx 251lx 112lx 63lx 40lx 112fc 28fc 12fc 7fc 4fc 3fc 2.8' 5.6' 8.4' 11.2' 14.0' 16.8' 18'

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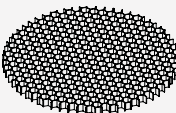
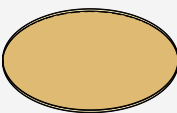
OPTICS

There are 4 interchangeable optics

Optic	Optic	Optic	Optic
			
Medium TIR Optic Molded ID 15	Wide TIR Optic Molded ID 24	Very Wide TIR Optic Molded ID 36	Ultra Wide TIR Optic Molded ID 50
Order Code HKRG-35-15-PC	Order Code HKRG-35-24-PC	Order Code HKRG-35-36-PC	Order Code HKRG-35-50-PC

ACCESSORIES

This product can hold 1 x accessory within the integrated holder. To accommodate additional accessories please contact our sales team. Accessories are pre-installed unless otherwise requested.

Glare Control	Colour Change
	
Honeycomb Louver W32xH3.2mm W1.26xH0.13"	1/4 CTO W32xH1.8mm W1.26xH0.07"
Order Code 995-32-BK	Order Code 997-1/4CTO-32

MINIMO PRO WARM DIM - NORTH AMERICA

FEATURE MAP

WARM DIM LIGHT ENGINE

