

4480-4x8xx 1FLUX LEDBAR

PRODUCT SUMMARY

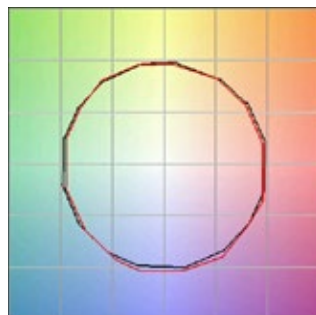
LEDBar 1Flux with One Step Macadam LED offers the tightest binning in a linear profile, ensuring colour consistency and uniformity in your interior projects from install to install.

PRODUCT DETAILS

- Linear interior LEDBar with 1-Step MacAdam ellipse LED: up to 1700lm/m
- 5 Year guarantee
- LED Lifetime: 50,000Hrs (70% lumen maintenance)
- LEDs/m available (Pitch [mm]): 60 (8.3) & 120 (16.7)
- LED White Colour: 2700K, 3000K, 4000K
- Colour Rendering Index (CRI): 90+
- Luminous Efficacy: Up to 93.8 lm/W
- Supply Voltage: 24V
- Driver: Remote constant voltage LED drivers available to suit LEDs.
- Dimming option: DALI, DMX, Analogue (0-10V) or Phase (Leading or Trailing)
- On board IC regulates optimum drive current to LEDs & allow for volt drop in DC voltage to strip (min 21Vdc max 36vdc)
- If temperature rises above maximum, sensor limits LED drive current until temperature reduces
- Rigid aluminium heatsink in custom lengths - 65mm - 2015mm. Silver Anodised finish.
- Supplied cable length: 500mm



TM-30 DATA - 1FLUX 3000K LEDs

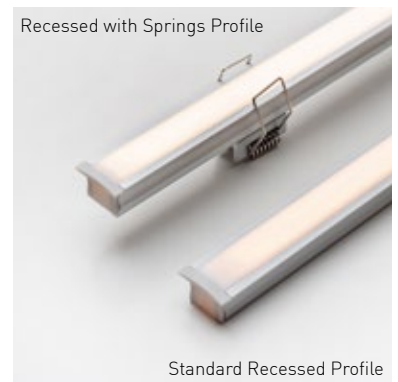
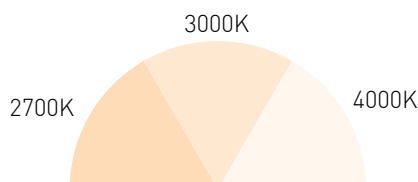


Rf = 89.4
Rg = 101

CRI COLOUR METRICS - 1FLUX 3000K LEDs

Ra	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
93	94	96	94	93	93	93	95	89	74	88	92	77	95	96	93

COLOUR TEMPERATURES AVAILABLE



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EXAMPLE SPECIFICATION

4480-42812-930-0515-D

1FLUX LEDBar Surface IP40, Frosted Cover Lens, 8.3mm pitch LEDs, CRI 95+ Warm White 3000K at 515mm Profile Length, Double Ended Wiring, Silver Anodised finish.

Profile Length (+ End Gaps) = 515mm, PCB Length = 500mm (10 x 500mm LED Modules), Total Length (+ End Caps) = 519mm Strip wattage = 9.6W (10 x 0.96 Module Power), Strip output = Up to 800lm.

PRODUCT CODE EXAMPLE : 4480 - 4 2 8 1 2 - 930 - 0515 - D

CHANNEL	Surface	Recessed	Mini Surface	Corner	Recessed + Springs
CODE	2	3	6	7	9

COVER (PMMA)	Clear	Frosted	Opal
CODE	0	1	2

LED PITCH (mm)	LED Module length (mm)	LEDs / Modules	LEDs / m	Strip Power (W/m)	Module Power (W)	CODE
16.7	100	6	60	14.4	1.44	1
8.3	50	6	120	19.2	0.96	2

COLOUR MIX	CCT (K)	CRI	Lumen Output / Pitch (lm/m)		CODE
			16.7	8.3	
Incandescent White	2700	90+	950	1550	927
Warm White	3000		1000	1600	930
Cool White	4000		1050	1700	940

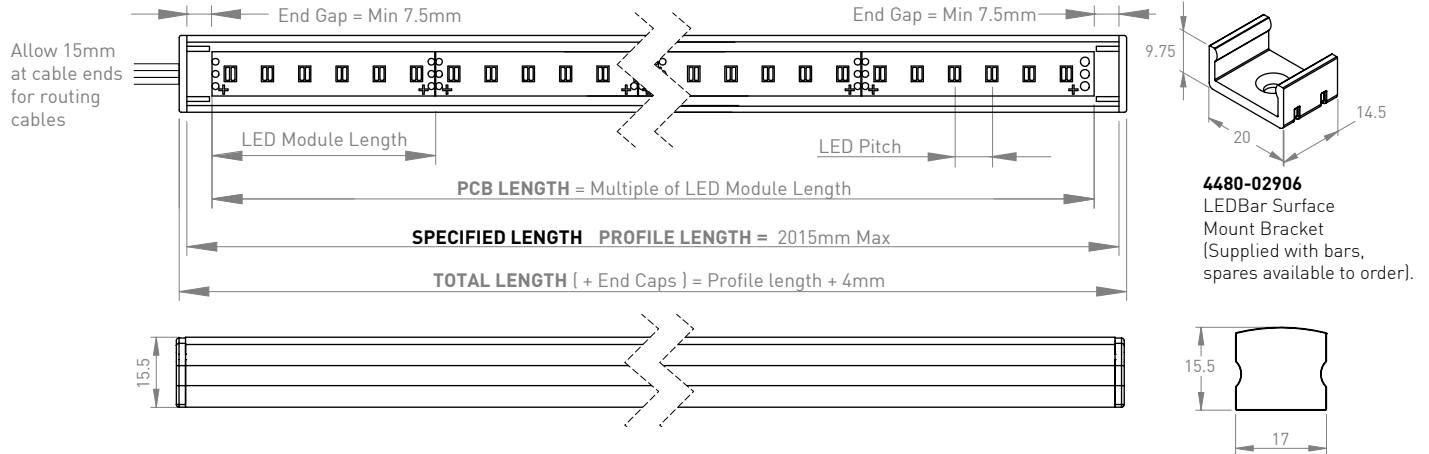
PROFILE LENGTH	
Minimum (mm)	65
Maximum (mm)	2015
CODE (Example with 8.3mm LED Pitch, 5 Modules + End Gaps)	0515
Maximum length in single wired run (mm)*	10,000

* Longer runs easily achievable using bus wiring - Please enquire for more information.

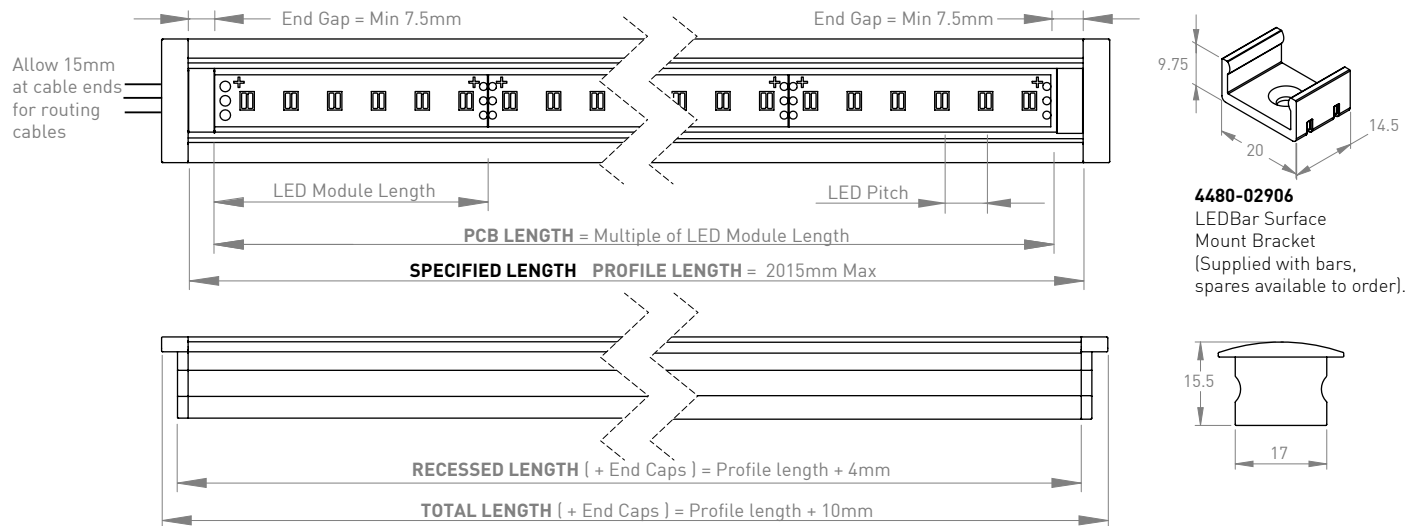
WIRING	Single Ended	Double Ended
CODE	S	D

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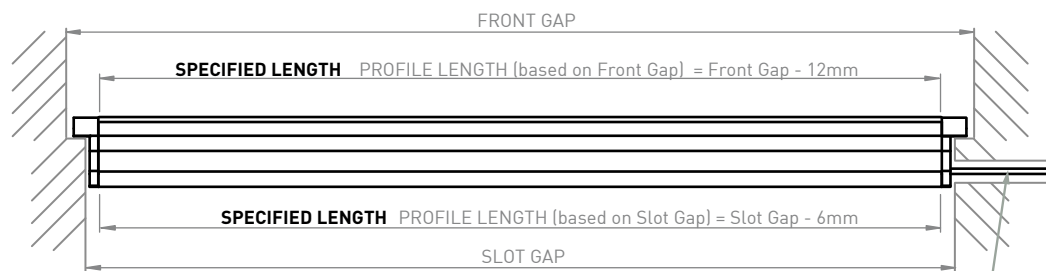
SURFACE PROFILE DIMENSIONS - CHANNEL CODE 2



RECESSED PROFILE DIMENSIONS - CHANNEL CODE 3



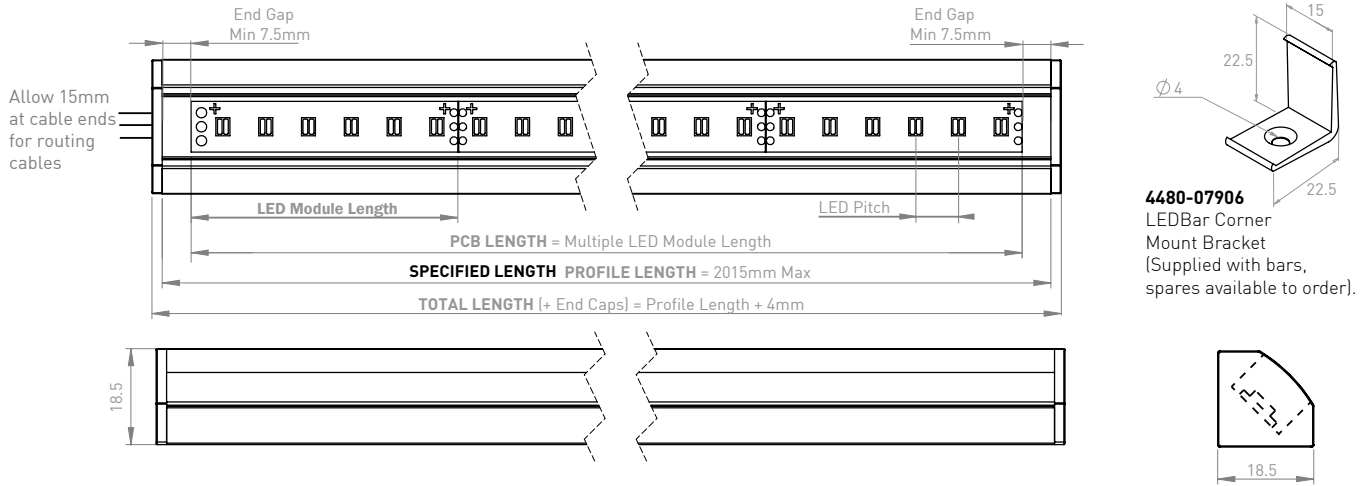
PRECISE RECESSED PROFILE LENGTHS:



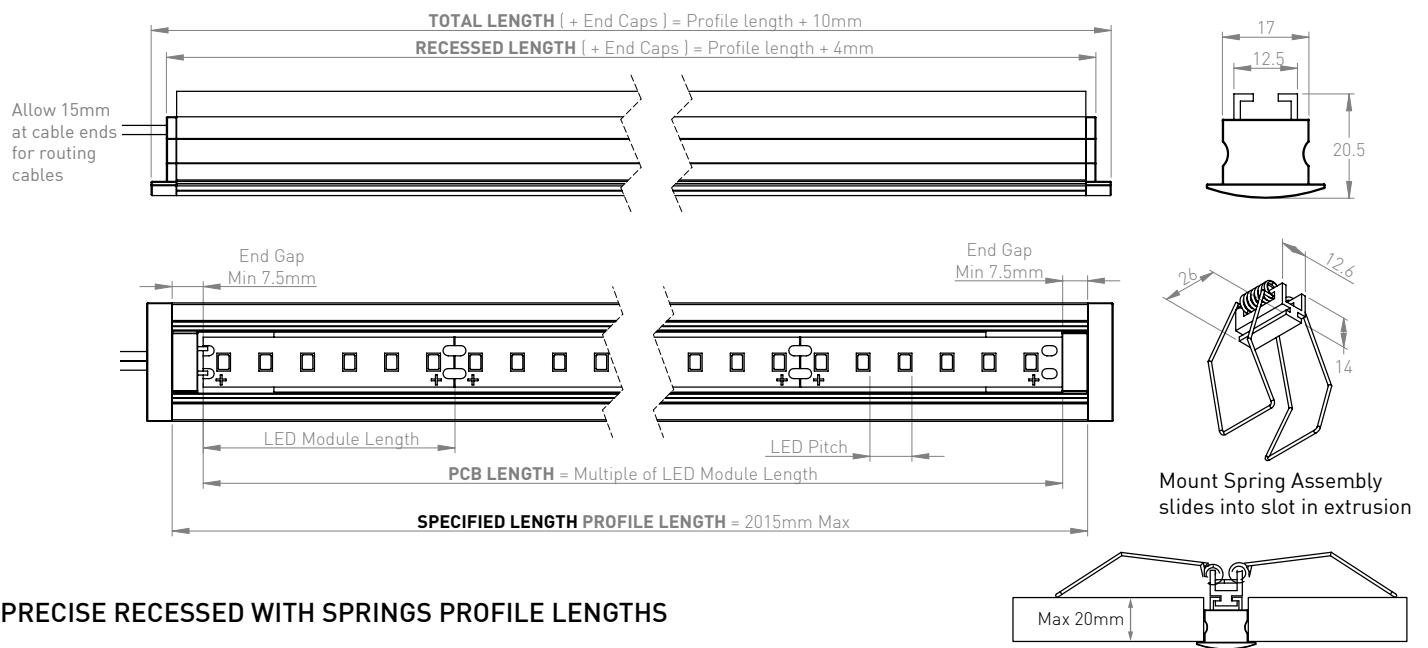
Consider cable exit/entry before mounting Recessed profile.
Allow sufficient space for routing cable.

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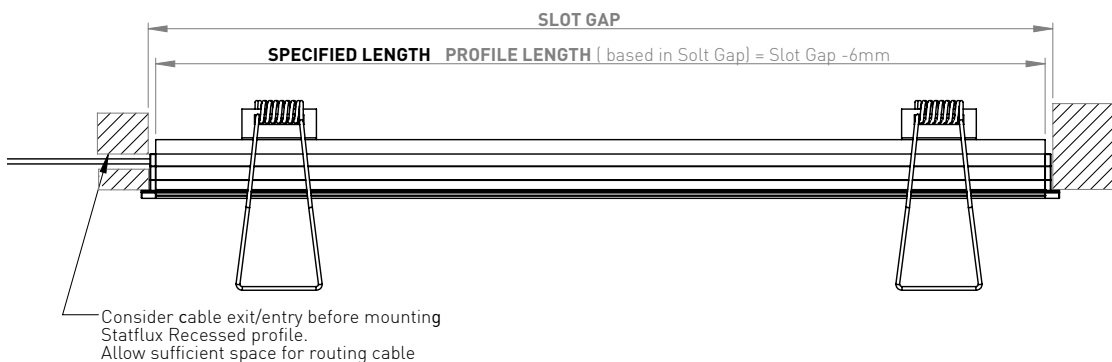
CORNER PROFILE DIMENSIONS - CHANNEL CODE 7



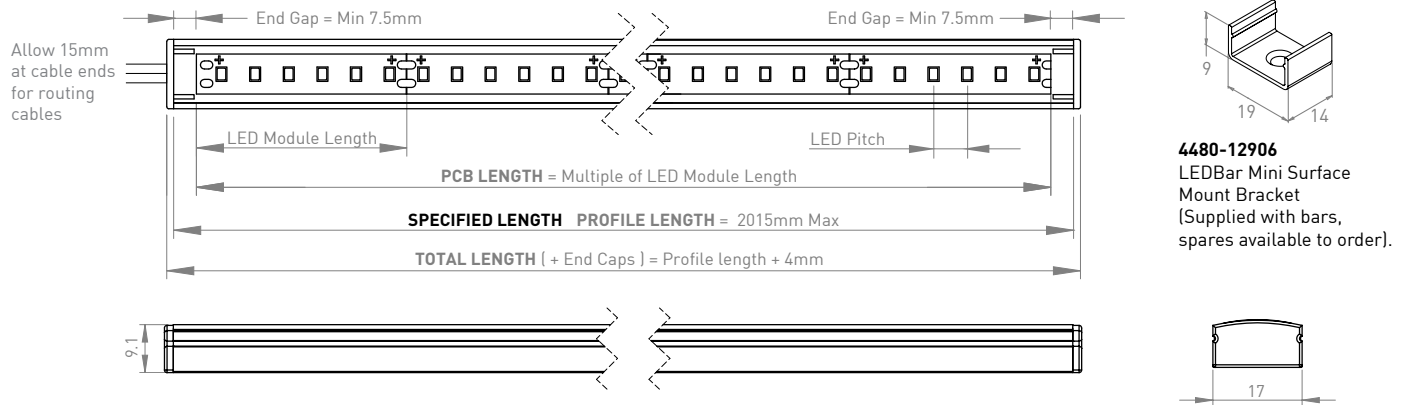
RECESSED WITH SPRINGS PROFILE DIMENSIONS - CHANNEL CODE 9



PRECISE RECESSED WITH SPRINGS PROFILE LENGTHS



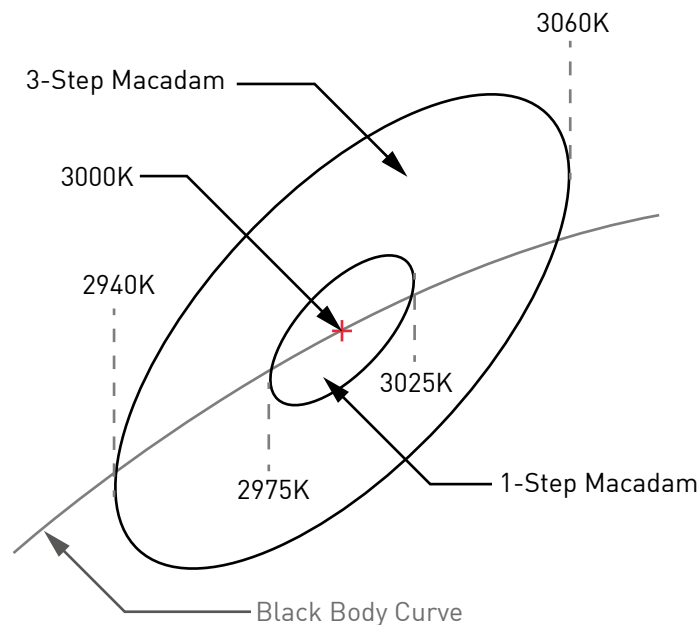
MINI SURFACE PROFILE DIMENSIONS - CHANNEL CODE 6



EXPLAINING 1-STEP MACADAM ELLIPSE

The MacAdam ellipse is a system of colour measurement. It measures how much colour variation is possible, before the human eye detects a colour change. A series of ellipses can then be drawn around any target colour, and the closer any given LED is to the target, the less colour deviation will be experienced when these LEDs are placed side by side in an installation.

The distance from the target point in each ellipse is measured in Standard Deviation Colour Matching (SDCM) steps. A SDCM (or MacAdam) 1 step means that there no discernible colour difference between LED chips, 2 steps is barely perceptible, while 3 steps in not generally noticeable and is the usual standard for professional commercial Lighting.



Example: 3000K: 1-Step = $\pm 25\text{K}$ (2975K-3025K), 3-Step = $\pm 60\text{K}$ (2940K-3060K)

1-STEPFLUX STANDARD LENGTH TABLE

PCB Module	ModuleLength = 50mm			ModuleLength = 100mm		
	PCB Length (mm)	Profile Length (mm)	Profile Length Code	PCB Length (mm)	Profile Length (mm)	Profile Length Code
1	50	65	0065	100	115	0115
2	100	115	0115	200	215	0215
3	150	165	0165	300	315	0315
4	200	215	0215	400	415	0415
5	250	265	0265	500	515	0515
6	300	315	0315	600	615	0615
7	350	365	0365	700	715	0715
8	400	415	0415	800	815	0815
9	450	465	0465	900	915	0915
10	500	515	0515	1000	1015	1015
⋮	⋮	⋮	⋮	⋮	⋮	⋮
20	1000	1015	1015	2000	2015	2015
⋮	⋮	⋮	⋮	⋮	⋮	⋮
40	2000	2015	2015	-	-	-

Table Shows all standard lengths for up to 10 modules and for major steps thereafter up to the longest length available for each LED pitch. Intermediate incremental lengths all available, though not listed here, and follow the same length and code steps.

CORRECTED CCT WITH COVERS

CCT (K)	CCT + FROSTED COVER (K)	CCT + OPAL COVER (K)
2700	2660	2620
3000	2960	2910
4000	3890	3750

SPECIFYING LENGTHS

1flux LEDBar is specified by profile length, in standard or precise lengths.

Standard lengths are based on the LED PCB length. The profile must be at least 65mm. PCB length is a multiple of the module length of chosen LED pitch plus 15mm end gap.

Minimum lengths of profile for each pitch:

16.7mm = 115mm (1 x 100mm PCB + 15mm min end gap)
 8.3mm = 65mm (1 x 50mm PCB + 15mm min end gap)

Precise lengths fit specific mounting locations. The profile is specified at its maximum length to fit the predetermined space. The LED PCB is centred within the profile and filled by a multiple of the selected LED module length.

When calculating the length of the LEDBar, the space required for end caps and cable entry needs to be considered.

*Allow a minimum of 7.5mm for each cable return / entry.

See Pages 3, 4 and 5 for full dimensions of profiles