

LineLED Warm Dim Series LLWD168-IP20



* MFG Model Number: LLWD51-XX



Warm Dimming

Features

The LineLED WD168-IP20 is a small profile and high output Warm Dim light strip. LineLED WD168-IP20 has three different incandescent dimming curves from either 2400K, 2700K, or 3000K at full brightness down to 1800K at the lowest dim levels. Compatibility with 0-10V, DALI, DALI2, MLV, ELV, and Incandescent dimmers simplifies installation for residential or hospitality applications. It is easily installed directly onto the mounting surface with double sided tape or within discrete aluminum extrusions to seamlessly blend into any space.

Mounting

LED strip is equipped with 3M™ adhesive tape.

Applications

Indoor only - millwork, cove, architectural reveals, undercabinet, display case, handrail, accent lighting.

Approvals

CE, UKCA, UL, Class 2

Operating voltage

24 VDC

Average Life (L70)

50,000 hours

Warranty

7 years



RoHS

CE

UKCA



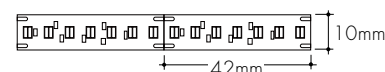
Technical information

TYPE	LLWD168-IP20								
OUTPUT OPTIONS	SO (18K-24K)	SO (18K-27K)	SO (18K-30K)	HO (18K-24K)	HO (18K-27K)	HO (18K-30K)	VHO (18K-24K)	VHO (18K-27K)	VHO (18K-30K)
Lumens Output (all channels full on)	544 lm/m	600 lm/m	617 lm/m	1168 lm/m	1260 lm/m	1296 lm/m	1660 lm/m	1795 lm/m	1847 lm/m
Average Power Consumption	7.5 W/m			15.4 W/m			22.6 W/m		
Efficacy	74 lm/W	80 lm/W	82 lm/W	75 lm/W	81 lm/W	83 lm/W	73 lm/W	79 lm/W	82 lm/W
Cutting Increment (mm)	42.0 mm								
Pitch Length	12.0 mm								
Max Run Length (in series)	11.3 m			6.7 m			4.6 m		
Dimensions	10 mm W x 1.5 mm H								
Ambient Operating Temperature Range*	- 25°C – 50°C			- 25°C – 45°C			- 25°C – 40°C		

* Ambient Operating Temperature Range to maintain L70 of 50K+ hours in normal conditions. Exceeding Ambient Operating Temperature Range may result in decreased life/output. Consult Technical Support for specific inquiries.

CCT	TM-30			
	CRI	R _f	R _g	R ₉
1800K	92	85	91	86
2400K	96	95	104	97
2700K	96	95	104	96
3000K	95	95	104	90

CCT	Multiplier (reference - 18K-30K)
18K24K	0.90
18K27K	0.97
18K30K	1.00



Ordering code

MODEL	OUTPUT	CCT	REEL SIZE
LLWD168-IP20 - LineLED Warm Dim, Dry Location	SO - Standard HO - High VHO - Very High	18K-24K - 1800K - 2400K 18K-27K - 1800K - 2700K 18K-30K - 1800K - 3000K	R10m - Reel, 10 meter



LineLED Warm Dim Series LLWD168-IP20

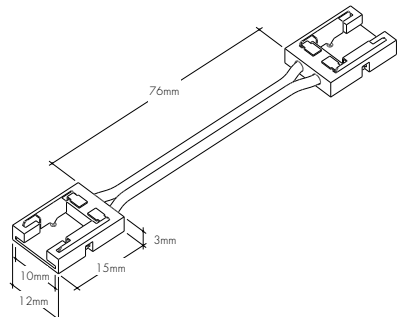
Minii Connectors

Minii connectors are easy, field-installable accessories that make joining LL strip simple! Their minimal width allows them to fit into extrusions, while their transparent frame eliminates dark spots.

Note: verify internal extrusion dimensions to confirm compatibility

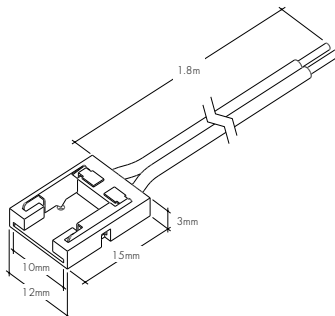
LL-PJC-10

Jumper minii connector with 76mm wire for LLWD168-IP20 LED strip



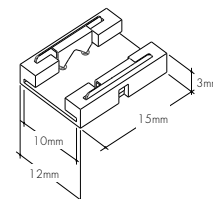
LL-PFC-10-1.8M

Power feed minii connector with 1.8m wire for LLWD168-IP20 LED strip

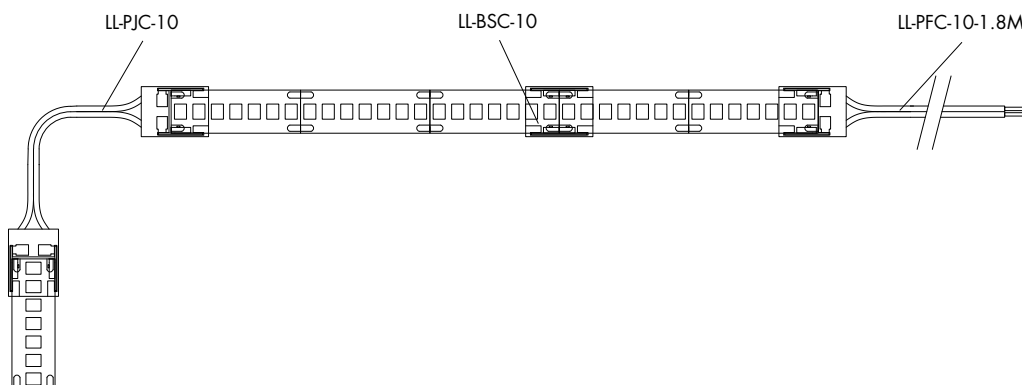


LL-BSC-10

Butt splice minii connector for LLWD168-IP20 LED strip



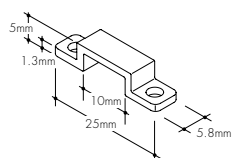
Sample Layout



Accessories

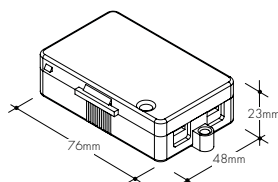
CL1

Mounting clip



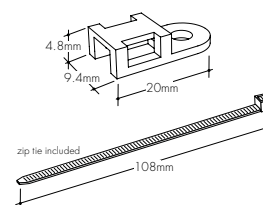
LVSP-IP20-4T-BK

Low Voltage, 4 Terminal Splice Box, Black



LL-ZIP

Cable/Wire Strain Relief Clip



Recommended every 300mm when LineLED strip is facing down



Lens Options / Light Transmission



Clear



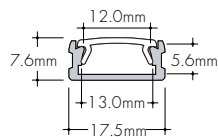
Half (50%)
Frosted



Frosted



KS Channel (KSC-XX)



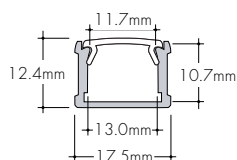
Ordering code

MODEL	LENGTH	LENS	MOUNTING ¹	FINISH
KSC-KS Channel	2M-2 meter	C-Clear HF-Half Frosted F-Frosted	FC-Fixed Clip FC45-Fixed Clip 45°	SA-Silver Anodized

1 - Extrusion comes with 4 selected clips and 2 end caps.



KM Channel (KMC-XX)



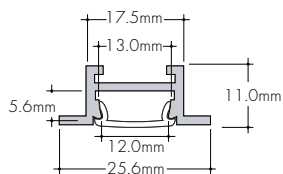
Ordering code

MODEL	LENGTH	LENS	MOUNTING ¹	FINISH
KMC-KM Channel	2M-2 meter	C-Clear HF-Half Frosted F-Frosted	FC-Fixed Clip FC45-Fixed Clip 45°	SA-Silver Anodized

1 - Extrusion comes with 4 selected clips and 2 end caps.



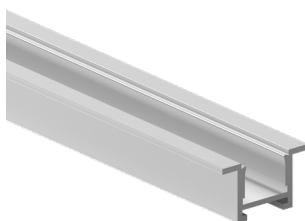
KRS Channel (KRSC-XX)



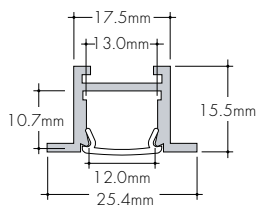
Ordering code

MODEL	LENGTH	LENS	MOUNTING ¹	FINISH
KRSC-KRS Channel	2M-2 meter	C-Clear HF-Half Frosted F-Frosted	HS-Hard Surface Mounting Bracket GS-Gypsum Surface Mounting Bracket	SA-Silver Anodized

1 - Extrusion comes with 4 selected clips and 2 end caps.



KRM Channel (KRMC-XX)



Ordering code

MODEL	LENGTH	LENS	MOUNTING ¹	FINISH
KRMC-KRM Channel	2M-2 meter	C-Clear HF-Half Frosted F-Frosted	HS-Hard Surface Mounting Bracket GS-Gypsum Surface Mounting Bracket	SA-Silver Anodized

1 - Extrusion comes with 4 selected clips and 2 end caps.

Installation

All mounting channels are field cuttable using miter saw with circular blade suitable for cutting aluminum.

Ordering

Extrusion are sold separately.



Lens Options / Light Transmission



Clear



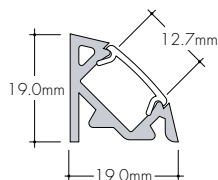
Half (50%)
Frosted



Frosted



K45V Channel (K45V-XX)



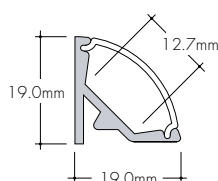
Ordering code

MODEL	LENGTH	LENS	MOUNTING ¹	FINISH
K45VC-K45V Channel	2M-2 meter	C-Clear HF-Half Frosted F-Frosted	CB-Concealed Bracket	SA-Silver Anodized

1 - Extrusion comes with 4 selected clips and 2 end caps.



K45R Channel (K45R-XX)



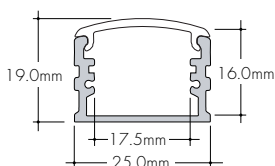
Ordering code

MODEL	LENGTH	LENS	MOUNTING ¹	FINISH
K45RC-K45R Channel	2M-2 meter	C-Clear HF-Half Frosted F-Frosted	CB-Concealed Bracket	SA-Silver Anodized

1 - Extrusion comes with 4 selected clips and 2 end caps.



Basics X-Large Channel
(BXC-XX)



Ordering code

MODEL	LENGTH	LENS	MOUNTING ¹	FINISH
BXC-Basics X-Large Channel	2M-2 meter	F-Frosted	FC-Fixed Clip	SA-Silver Anodized

1 - Extrusion comes with 4 selected clips and 2 end caps.

Installation

All mounting channels are field cuttable using miter saw with circular blade suitable for cutting aluminum.

Ordering

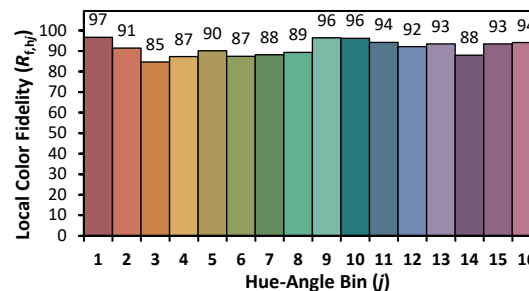
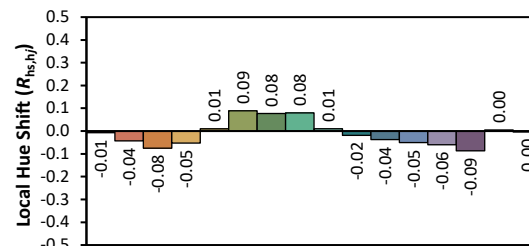
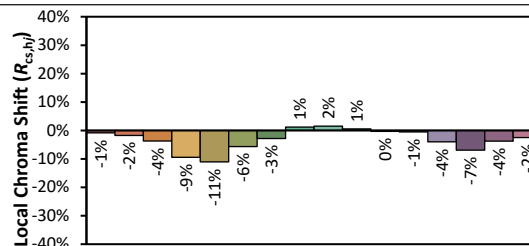
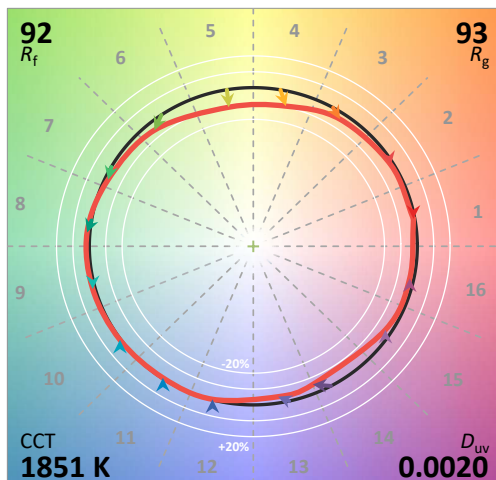
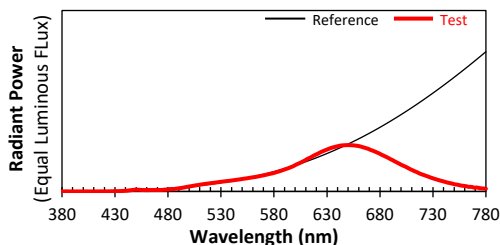
Extrusion are sold separately.



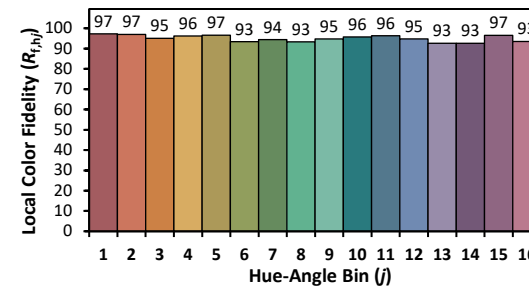
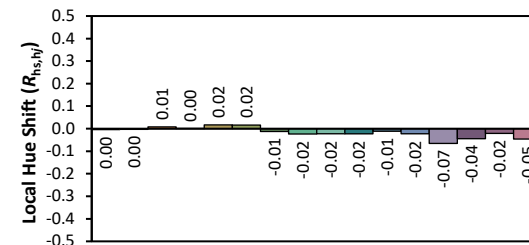
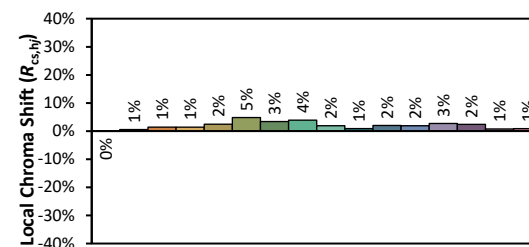
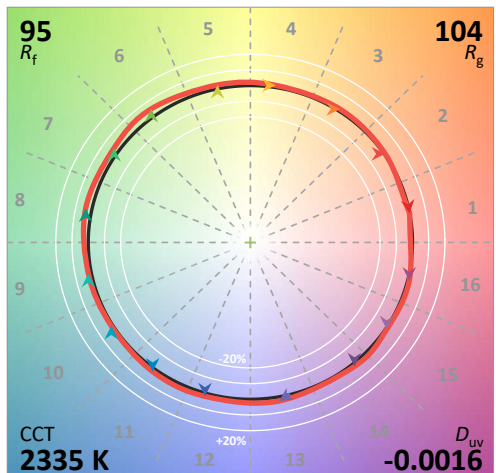
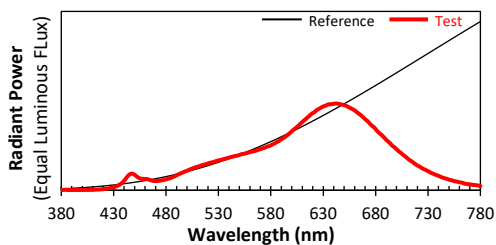
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TM-30-18: Data

1800K (1 channel on)



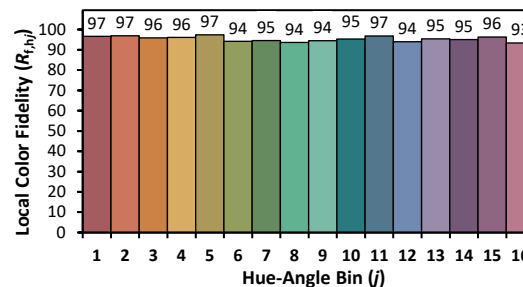
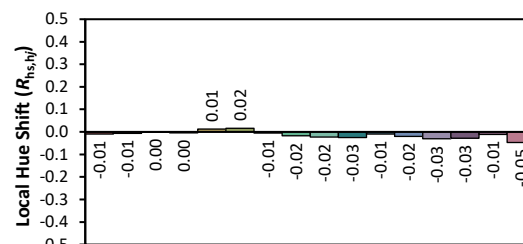
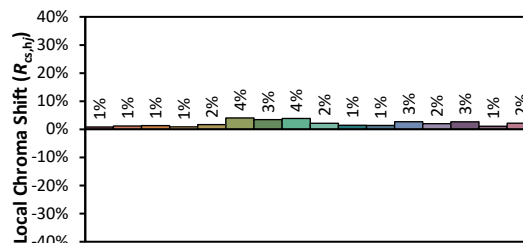
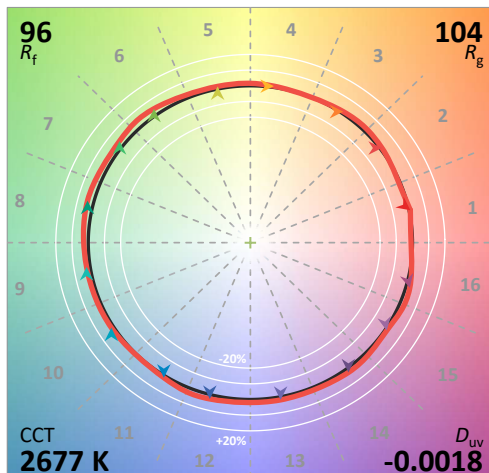
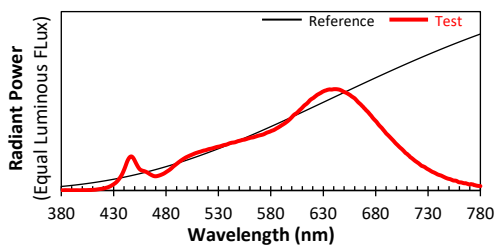
2400K (Both channels on at full brightness)



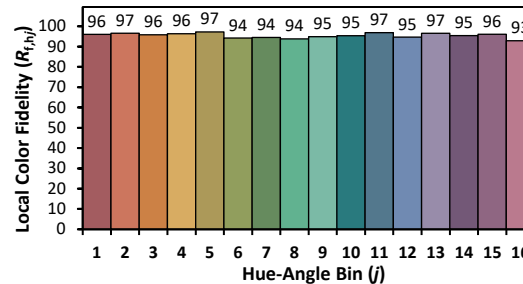
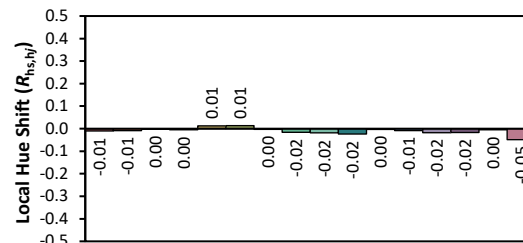
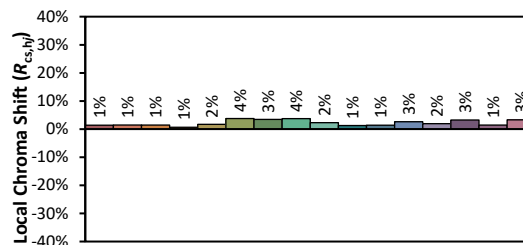
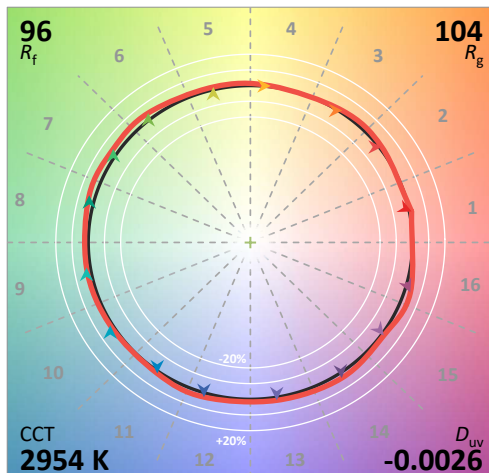
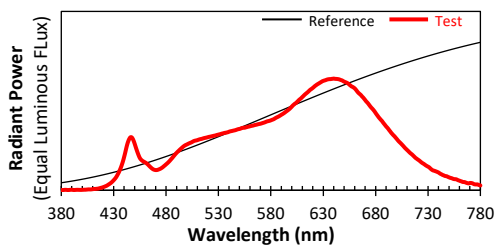
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TM-30-18: Data

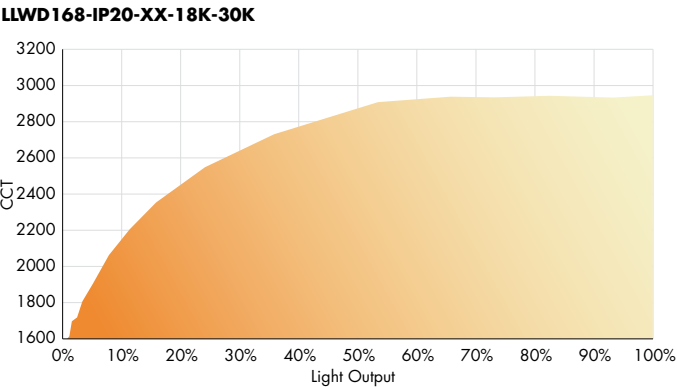
2700K (Both channels on at full brightness)



3000K (Both channels on at full brightness)



Lightoutput (When Dimming with 20Khz PWM 24VDC Driver)



Dimming Table				
Voltage (V)	Dim %	Flux (lm)	CCT (K)	R9
2.3	1%	12	1601	79
3.1	1%	18	1614	75
4.3	2%	25	1697	86
5.5	2%	38	1719	84
6.9	3%	53	1806	91
8.0	5%	81	1906	95
9.1	8%	123	2063	98
10.7	11%	178	2205	93
11.7	16%	248	2353	90
13.2	24%	377	2548	89
14.6	36%	560	2731	89
16.1	53%	836	2908	89
18.1	66%	1029	2938	90
19.6	73%	1146	2934	89
21.3	83%	1292	2943	90
22.9	93%	1459	2933	90
23.8	100%	1564	2946	91
23.8	100%	1564	2947	90

