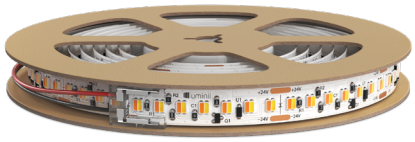
LineLED Warm Dim Series LLWD168-IP20



* MFG Model Number: LLWD51-XX

IP20

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
LLED 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

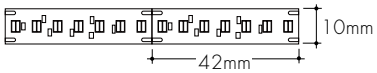
Technical information

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 inquires.

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

Lifetime and Environmental

At Luminii, we design our LED strip systems with longevity and responsible material use in mind. Our products are engineered to be serviceable and adaptable, with modular components such as drivers and controls that can be replaced or upgraded without full system replacement.
We are actively reducing the environmental impact of our packaging by transitioning to paper-based solutions for reels, bags, and outer packaging wherever possible, while minimising material use and avoiding mixed materials to improve recyclability.
We prioritise the use of recyclable materials in both our products and packaging, and encourage responsible disposal in line with local recycling and WEEE regulations.

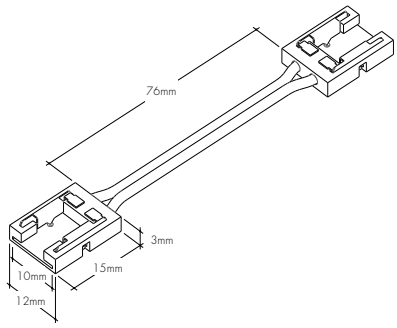
CIBSE TM65	51.5 Kg/CO_2e (10m complete reel)
CIBSE TM66	2.1
RoHS Compliance	Yes
REACH Compliance	Yes
WEEE Compliance	Yes - Registered Producer
Declare	See North American Product
Lifetime	L90B10 100,000hrs
Warranty	7 Years

*LUMINII RESERVES THE RIGHTS TO CHANGE SPECIFICATION & INSTRUCTION WITHOUT NOTICE

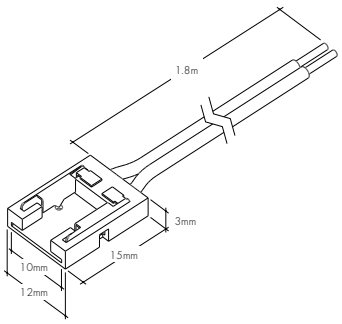
Minii Connectors

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

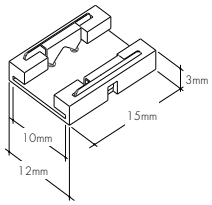
LL-PJC-10
Jumper minii connector with 76mm wire for LLWD168-IP20 LED strip



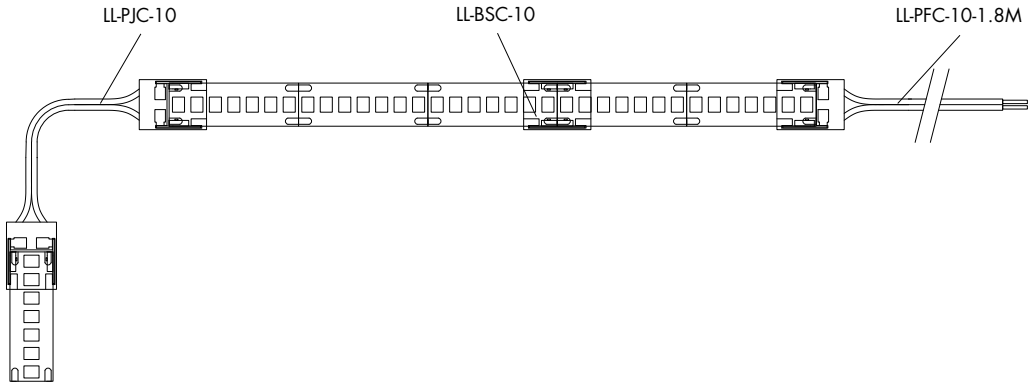
LL-PFC-10-1.8M
Power feed minii connector with 1.8m wire for LLWD168-IP20 LED strip



LL-BSC-10
Butt splice minii connector for LLWD168-IP20 LED strip

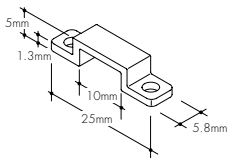


Sample Layout

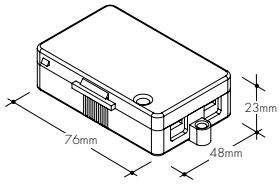


Accessories

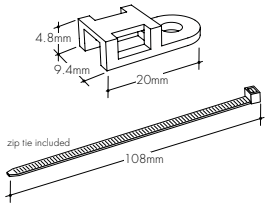
CL1
Mounting clip



LVSP-IP20-4T-BK
Low Voltage, 4 Terminal Splice Box, Black



LL-ZIP
Cable/Wire Strain Relief Clip



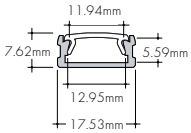
Recommended every 300mm when LineLED strip is facing down

*LUMINII RESERVES THE RIGHTS TO CHANGE SPECIFICATION & INSTRUCTION WITHOUT NOTICE

Lens Options / Light Transmission

KS CHANNEL
-KSC





Ordering code

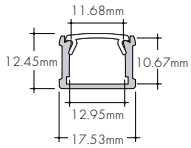
MODEL	LENGTH	LENS	MOUNTING[1]	FINISH
KSC - KS Channel	2M - 2 metre	C - Clear F - Frosted	FC - Fixed Clip FC45 - Fixed Clip 45°	SA - Silver Anodized

1 - Extrusion comes with 3 selected clips and 2 end caps.

Lens	Clear Lens				Frosted Lens			
Dimming Level	100%	50%	10%	1%	100%	50%	10%	1%
Dotting	CD	CD	CD	CD	ND	SD	SD	CD
Transmission	90%				56%			

KM CHANNEL
-KMC





Ordering code

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

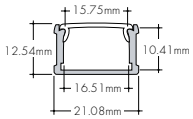
1 - Extrusion comes with 3 selected clips and 2 end caps.

Lens	Clear Lens				Frosted Lens			
Dimming Level	100%	50%	10%	1%	100%	50%	10%	1%
Dotting	CD	CD	CD	CD	ND	ND	ND	ND
Transmission	82%				51%			

Compatible with
- Minii connectors

KXL CHANNEL
-KXLC





Ordering code

MODEL	LENGTH	LENS	MOUNTING[1]	FINISH
KXLC - KXL Channel	2M - 2 metre	C - Clear F - Frosted	FC - Fixed Clip FC45 - Fixed Clip 45°	SA - Silver Anodized

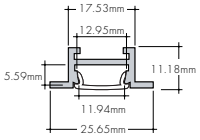
1 - Extrusion comes with 3 selected clips and 2 end caps.

Lens	Clear Lens				Frosted Lens			
Dimming Level	100%	50%	10%	1%	100%	50%	10%	1%
Dotting	CD	CD	CD	CD	ND	ND	ND	ND
Transmission	86%				54%			

Compatible with
- Minii connectors

KRS CHANNEL
-KRSC





Ordering code

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

1 - Extrusion comes with 3-HS/6-GS selected clips and 2 end caps.

Lens	Clear Lens				Frosted Lens			
Dimming Level	100%	50%	10%	1%	100%	50%	10%	1%
Dotting	CD	CD	CD	CD	ND	SD	SD	CD
Transmission	90%				56%			

Installation

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

Ordering

Extrusion are sold separately.

Dotting



CD - Clear Dotting

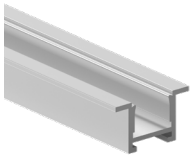
SD - Slight Dotting

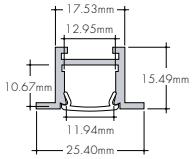
ND - No Dotting

*LUMINII RESERVES THE RIGHTS TO CHANGE SPECIFICATION & INSTRUCTION WITHOUT NOTICE

Lens Options / Light Transmission

KRM CHANNEL -KRMC





Compatible with
- Minii connectors

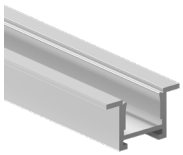
Ordering code

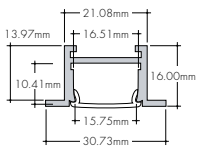
MODEL	LENGTH	LENS	MOUNTING[1]	FINISH
KRMC - KRM Channel	2M - 2 metre	C - Clear F - Frosted	HS - Hard Surface Mounting Bracket GS - Gypsum Surface Mounting Bracket	SA - Silver Anodized

1 - Extrusion comes with 3-HS/6-GS selected clips and 2 end caps.

Lens	Clear Lens				Frosted Lens			
Dimming Level	100%	50%	10%	1%	100%	50%	10%	1%
Dotting	CD	CD	CD	CD	ND	ND	ND	ND
Transmission	82%				51%			

KRXL CHANNEL -KRXLC





Compatible with
- Minii connectors

Ordering code

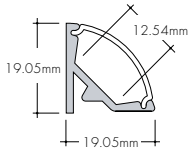
MODEL	LENGTH	LENS	MOUNTING[1]	FINISH
KRXLC - KRXL Channel	2M - 2 metre	C - Clear F - Frosted	HS - Hard Surface Mounting Bracket GS - Gypsum Surface Mounting Bracket	SA - Silver Anodized

1 - Extrusion comes with 3-HS/6-GS selected clips and 2 end caps.

Lens	Clear Lens				Frosted Lens			
Dimming Level	100%	50%	10%	1%	100%	50%	10%	1%
Dotting	CD	CD	CD	CD	ND	ND	ND	ND
Transmission	86%				54%			

K45R CHANNEL -K45RC





Compatible with
- Minii connectors

Ordering code

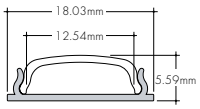
MODEL	LENGTH	LENS	MOUNTING[1]	FINISH
K45RC - K45R Channel	2M - 2 metre	RF - Round Frosted	CB - Concealed Bracket	SA - Silver Anodized

1 - Extrusion comes with 3 selected clips and 2 end caps.

Lens	Round Frosted			
Dimming Level	100%	50%	10%	1%
Dotting	ND	ND	ND	ND
Transmission	65%			

KLB CHANNEL -KLBC





Compatible with
- Minii connectors

Ordering code

MODEL	LENGTH	LENS	MOUNTING[1]	FINISH
KLBC - KL Bendable Channel	2M - 2 metre	F - Frosted	FC - Fixed Clip	SA - Silver Anodized

1 - Extrusion comes with 7 selected clips and 2 end caps.

Lens	Round Frosted			
Dimming Level	100%	50%	10%	1%
Dotting	ND	ND	ND	ND
Transmission	57%			

Installation

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

Ordering

Extrusion are sold separately.

Dotting



CD - Clear Dotting

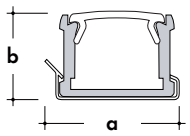
SD - Slight Dotting

ND - No Dotting

*LUMINII RESERVES THE RIGHTS TO CHANGE SPECIFICATION & INSTRUCTION WITHOUT NOTICE

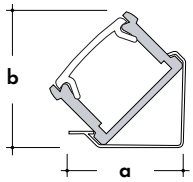
Mounting Clips for KSC, KMC and KLXC

Fixed mounting clip
-FC



Model	a (mm)	b (mm)
KSC	19.6	7.9
KMC	20.6	13.5
KXLC	24.1	13.2

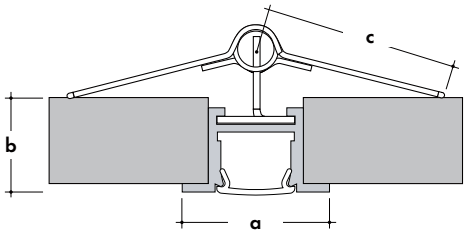
Fixed mounting clip 45°
-FC45



Model	a (mm)	b (mm)
KSC	17.0	16.3
KMC	17.5	20.8
KXLC	23.4	23.4

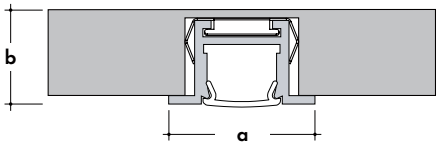
Mounting Clips for KRSC, KRMC and KRXLC

Stainless Steel Gypsum Surface Mounting Bracket
-GS



Model	a (mm)	b (mm)	c (mm)
KRSC	25.7	22.4	35.6
KRMC	25.7	26.7	35.6
KRXLC	30.7	26.7	35.6

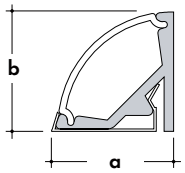
Stainless Steel Hard Surface Mounting Bracket
-HS



Model	a (mm)	b (mm)
KRSC	25.7	11.7
KRMC	25.7	16.3
KRXLC	30.7	16.3

Mounting Clip for K45RC

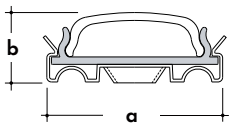
Stainless Steel Concealed Bracket
-CB



Model	a (mm)	b (mm)
K45RC	19.0	19.0

Mounting Clip for KLBC

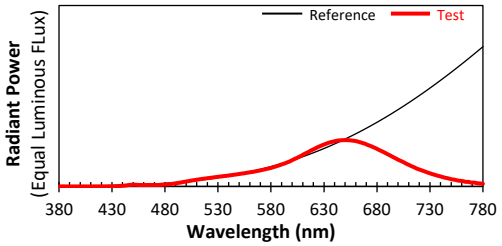
Stainless steel screw-in mounting bracket
-FC

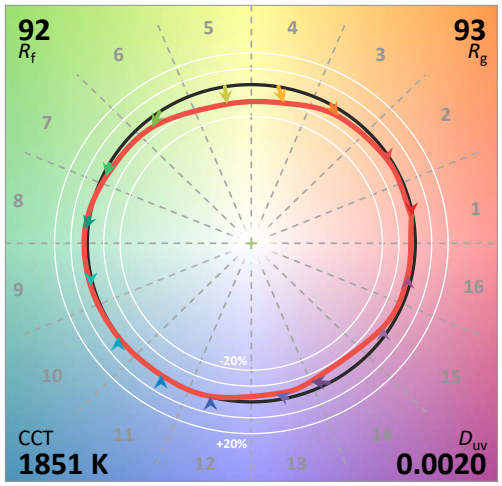


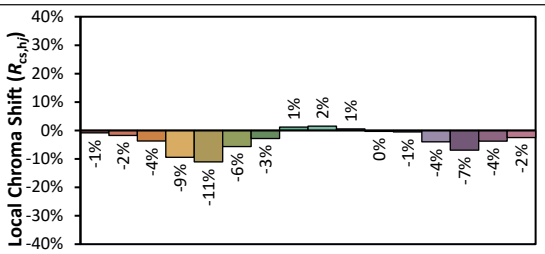
Model	a (mm)	b (mm)
KLBC	19.3	7.6

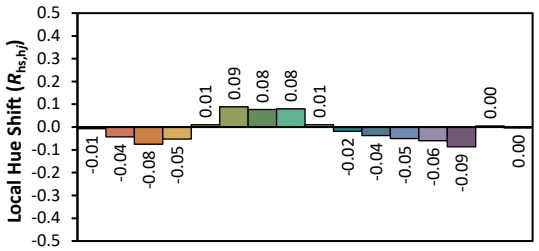
TM-30-18: Data

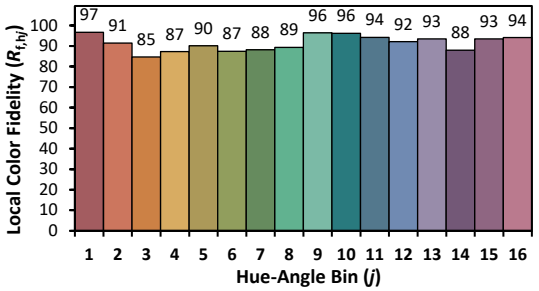
1800K (1 channel on)



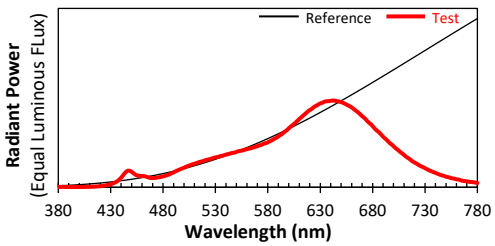


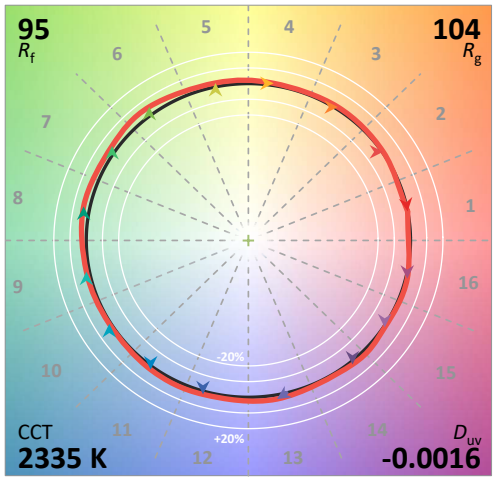


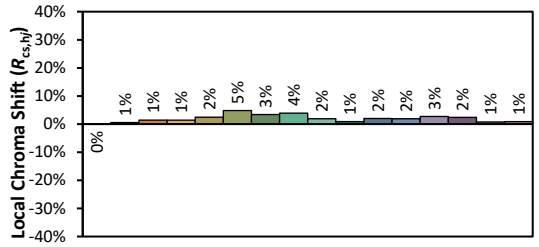


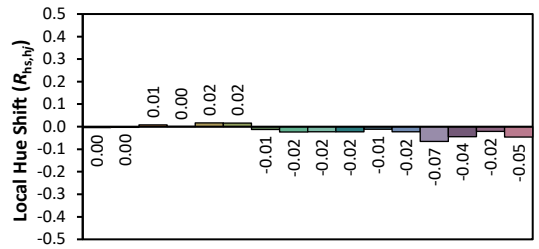


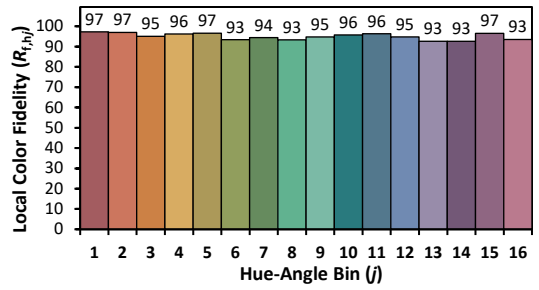
2400K (Both channels on at full brightness)







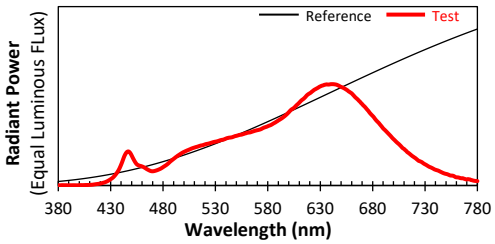


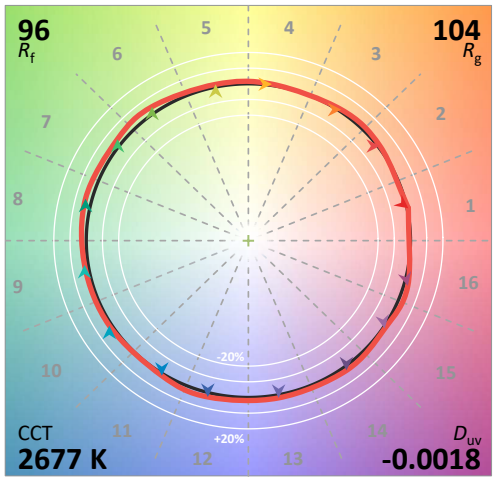


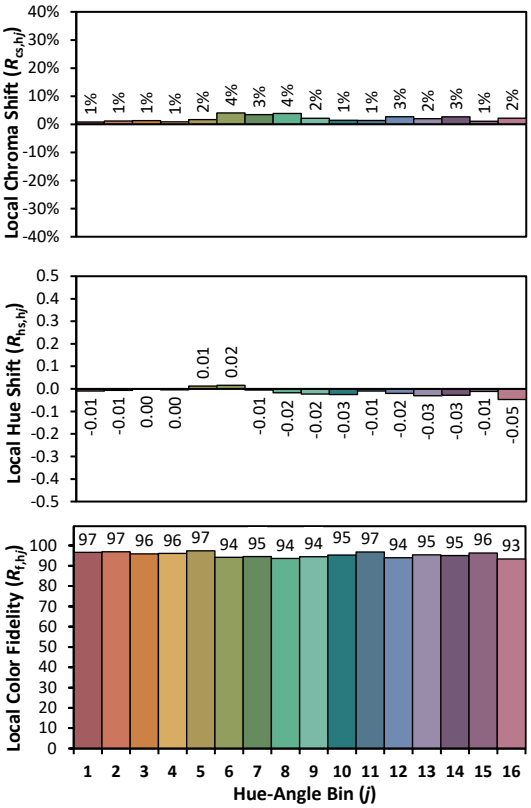
*LUMINII RESERVES THE RIGHTS TO CHANGE SPECIFICATION & INSTRUCTION WITHOUT NOTICE

TM-30-18: Data

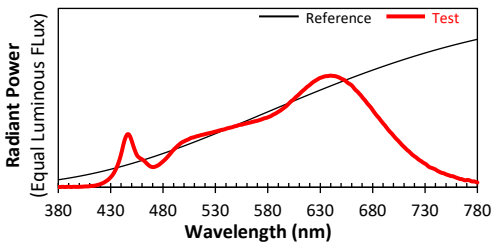
2700K (Both channels on at full brightness)

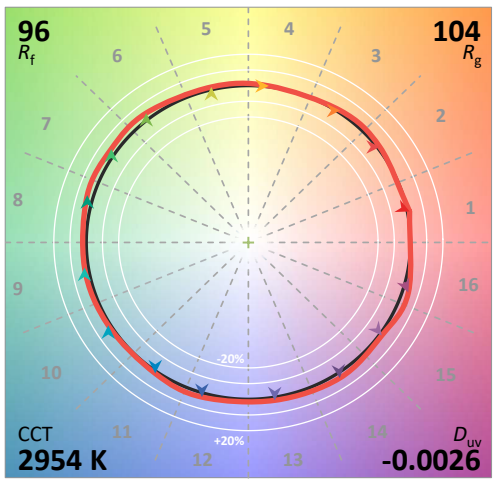


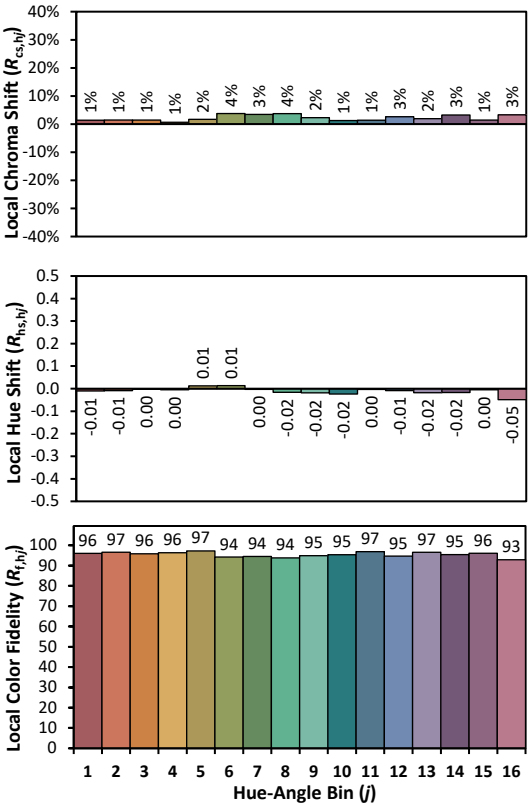




3000K (Both channels on at full brightness)



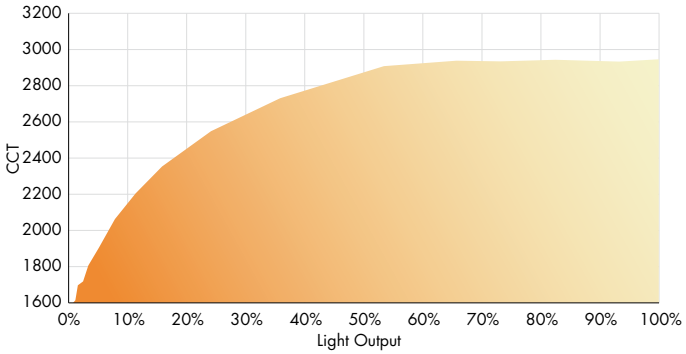




*LUMINII RESERVES THE RIGHTS TO CHANGE SPECIFICATION & INSTRUCTION WITHOUT NOTICE

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

LLWD168-IP20-XX-18K-30K



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

LineLED Warm Dim Series LLWD168-IP20

Power Supplies for UK, EU, Middle East, Asia and Pacific

Warm Dim - DALI 2| Remote | Constant Voltage

Input Voltage	230V AC I 50/60 Hz
Driver Type	Remote I Constant Voltage
Location	IP20 I Indoor Location Only
Dimming Control	DALI 2
Min. Dim Level	0.1%
Flicker	IEEE 1789 Compatible I No Observable Effect



MODELS	40W	75W	150W	240W
Order Code	PSCV-40-24-D-EU	PSCV-75-24-D-EU	PSCV-150-24-D-EU	PSCV-240-24-D-EU
Length (mm)	185	295	295	360
Width (mm)	40	40	40	40
Depth (mm)	30	30	30	30

Warm Dim - 0-10V| Remote | Constant Voltage

Input Voltage	230V AC I 50/60 Hz
Driver Type	Remote I Constant Voltage
Location	IP20 I Indoor Location Only
Dimming Control	0-10V
Min. Dim Level	0.1%
Flicker	IEEE 1789 Compatible I No Observable Effect



MODELS	40W	75W	150W	240W
Order Code	PSCV-40-24-A-EU	PSCV-75-24-A-EU	PSCV-150-24-A-EU	PSCV-240-24-A-EU
Length (mm)	185	295	295	360
Width (mm)	40	40	40	40
Depth (mm)	30	30	30	30

Max Series Run Length and Voltage Drop

The maximum series run length must not be exceeded. LED strips must be cut and re-fed from the power supply if the required length exceeds this. Maximum series run lengths can be found on page 1 and vary per output.
Voltage drop must not exceed 3% between the PSU and start of the LED strip. Click or scan the QR code to visit our online voltage drop calculator.