

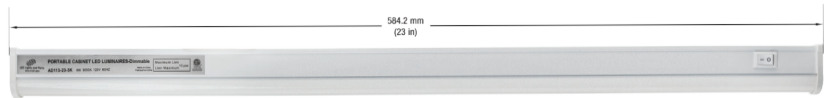


## AD113-23-3K

### 23" T5 BAR 120V 9W 760LM 3000K (WARM WHITE)

#### Specifications

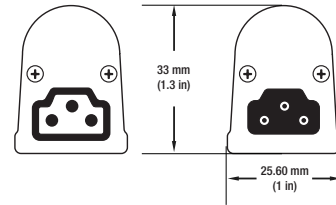
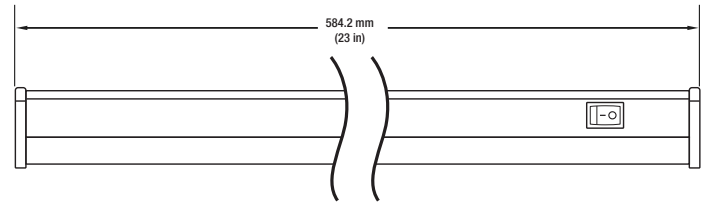
<b>Model No.:</b>	AD113-23-3K
<b>Input Voltage:</b>	120V
<b>Wattage:</b>	9W
<b>Color Temperature:</b>	Warm White (3000K)
<b>Brightness:</b>	760 Lumens
<b>Beam Angel:</b>	130°
<b>Body Color:</b>	White
<b>Dimmable:</b>	Yes
<b>IP Rated:</b>	IP20 (Indoor rated)
<b>Dimensions:</b>	584.2 x 33 x 25.6 mm (23 x 1.3 x 1 in)
<b>Certification:</b>	ETL



**SKU: 666561416140**

#### Features

- Low power consumption, and high energy efficiency.
- Widely popular in wardrobes, cabinets, and shelves of a modern kitchen.
- Available in different lengths (9, 11, 23, 34, and 46 inches)
- Applicable for cabinets, shelves, closets, ceiling, shower doors, windows, accent lighting, stairs, etc.
- Has a high-quality reflector, and avoids glaring.
- A good replacement for the fluorescent tube.
- Dissipates very less heat and is safe to touch.
- Has a lifespan of 50,000 hours.
- Has a switch of its own on the fixture.
- Several lengths (Maximum 10) can be positioned together.
- Comes with a small connector, in case want to connect with another light fixture of any length.
- We also carry the wire connector for connecting one light fixture with another.
- Need to buy a cord separately for the plug-In application.
- We also carry a box for hardwiring the lights rather than a plugin in an outlet.
- Comes with mounting brackets and endcaps.
- Brackets help in the easy installation of the light fixture.
- Comes along with the steps for easy installation.
- Suitable for dry and damp locations with an IP20 rating.
- Is an eco-friendly product, free from UV or any hazardous materials with RoHS certification.
- Two years of store warranty.



#### Components (Sold Separately)

- T5 Bar Flex Connector 3 inches
- T5 Bar Hardwire Box
- T5 Bar Plug-in Cord 5ft cord

**Model: AD-113-24-C**  
**3in Flex Connector Cable**  
**SKU: 666561416188**



**Model: AD-113-24-B**  
**T5 LED Bar Hardwire Box Switch**  
**SKU: 666561416171**

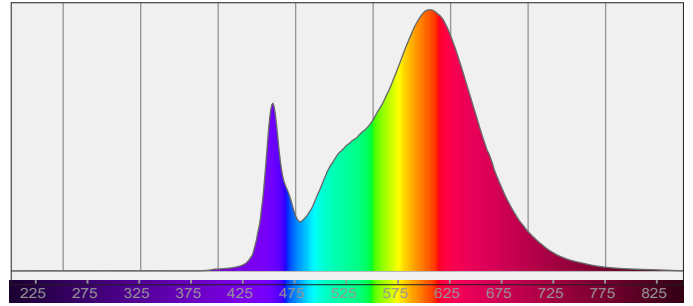
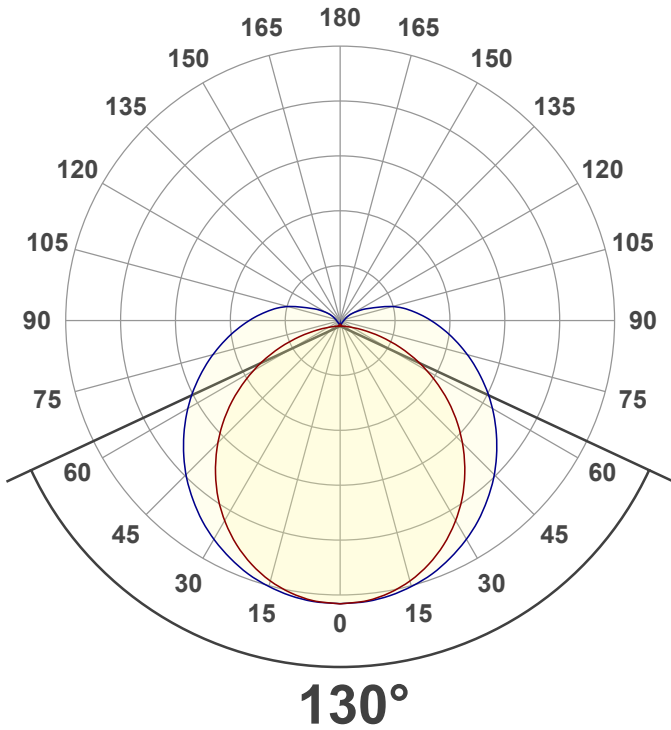


**Model: AD-113-24-CO**  
**5ft T5 Linkable Light Bar Plug-in Cord**  
**SKU: 666561416195**

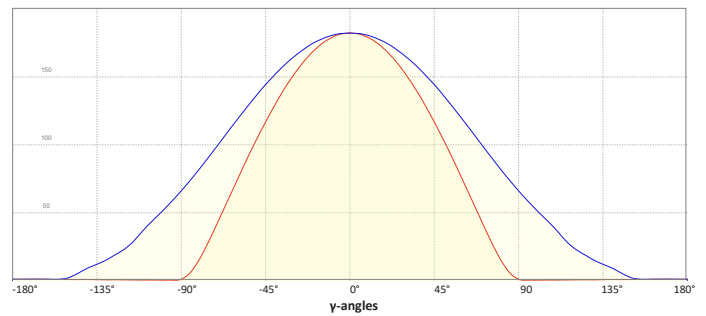


#### Disclaimer

The data and information contained in this specification sheet are subject to change without notice; the ratings supplied are provided based on the product manufacturer. The information contained in this specification sheet should not be considered a warranty, expressed or implied, including, but not limited to, a warranty of merchantability or fitness for a particular purpose. In no event shall LED Lights and Parts be liable for any incidental or consequential damages resulting from the use, misuse, or inability to use the product. This exclusion applies regardless of whether such damages are sought based on breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory.



Linear distribution diagram - Intensity (candela) vs  $\gamma$ -angle

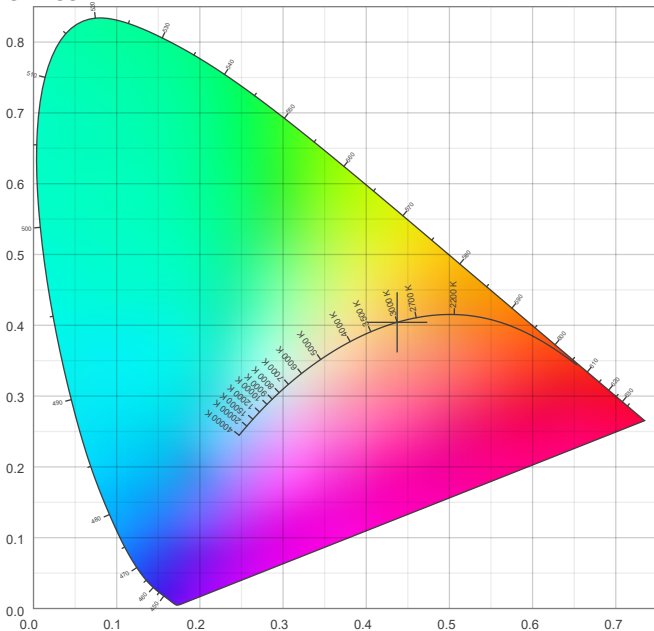


### Color details

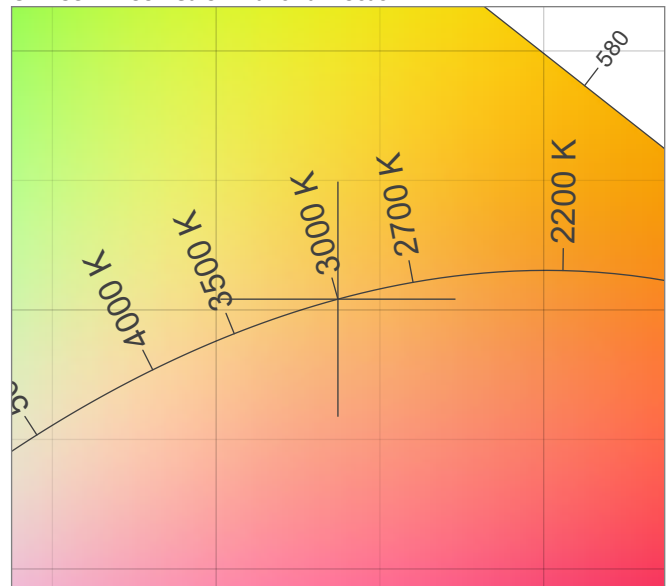
Correlated Color Temperature, Target CCT = 3000 K  
 Correlated Color Temperature, Measured CCT = 2992 K  
 Color Rendering Index CRI 84.8  
 Color Rendering Index, R9 (red component) R9 = 15.4  
 Color Rendering TM30-18 R<sub>f</sub> 85.7 – R<sub>g</sub> 96.6  
 Color Quality Scale CQS = 83.3

MacAdam Steps SDCM = 2.3  
 Color coordinates CIE 1931 (x;y) = (0.437;0.404)  
 Color coordinate CIEs 1960 (u;v) = (0.251;0.348)  
 Color deviation from BBL Duv = -0.0023  
 Color coordinate CIEs 1976 (CIELUV) (u';v') = (0.251;0.251)

### CIE 1931

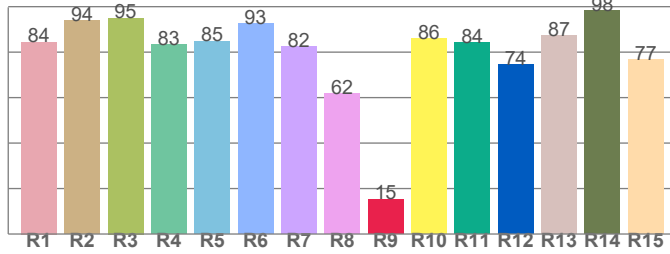


### CIE 1931 – zoomed on Planckian locus





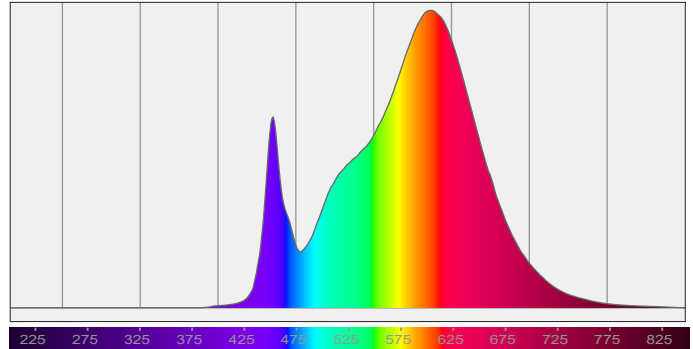
### Color Rendering Index per reference color (CIE 1995)



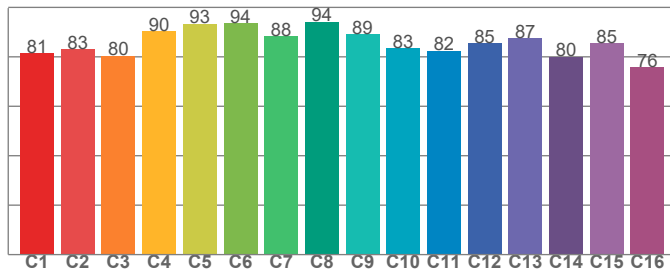
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
84.5	93.8	95.0	83.3	84.9	92.6	82.4	61.6	15.4	85.9	84.0	74.5	87.1	98.2	76.6

### Spectral power distribution (SPD) / W/nm – 0-100%



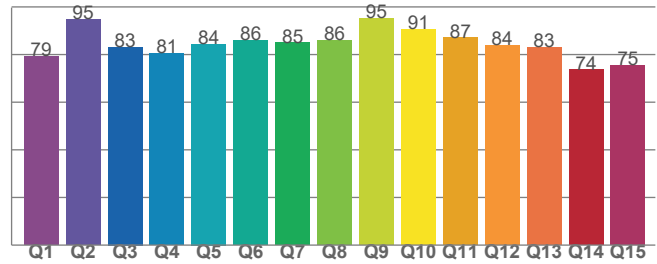
### TM30-18 Rf-values per hue bin



TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
84.5	93.8	95.0	83.3	84.9	92.6	82.4	61.6	15.4	85.9	84.0	74.5	87.1	98.2	76.6	76.6

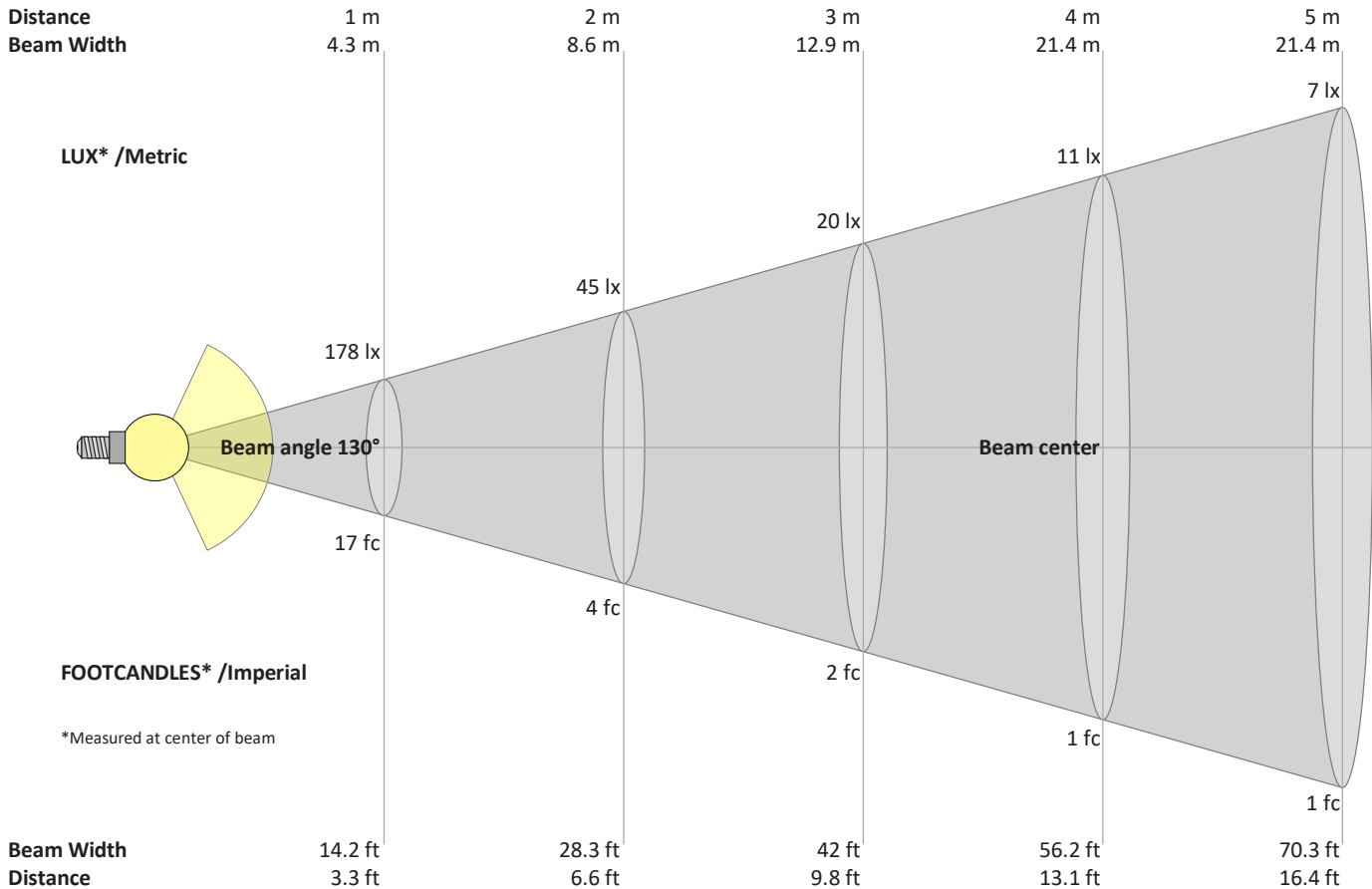
### Color Quality Scale by reference color



CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
79.2	94.6	82.2	81.5	84.1	85.0	85.0	86.1	95.1	90.5	87.0	83.0	82.0	73.7	75.4

### Beam Details





### Beam intensities from 1 – 20 m

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	m
3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6	ft
178	45	20	11	7	5	4	3	2	2	1	1	1	1	1	1	1	1	0	0	lux
16.6	4.1	1.8	1	0.7	0.5	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	fc

### Intensities in 0° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°	γ	
178	175	167	154	136	114	90	64	38	14	1	0	0	1	1	1	1	1	1	1	cd	
100%	98%	94%	86%	76%	64%	51%	36%	21%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	of 0°val

### Intensities in 90° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°	γ
178	177	172	164	154	141	126	111	95	79	65	52	39	27	18	12	6	1	1	1	cd
100%	99%	97%	92%	86%	79%	71%	62%	53%	44%	36%	29%	22%	15%	10%	7%	3%	1%	1%	1%	of 0°val

### Intensities in 180° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°	γ	
178	175	167	154	136	114	90	64	38	14	1	0	0	1	1	1	1	1	1	1	cd	
100%	98%	94%	86%	76%	64%	51%	36%	21%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	of 0°val

### Intensities in 270° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°	γ
178	177	172	164	154	141	126	111	95	79	65	52	39	27	18	12	6	1	1	1	cd
100%	99%	97%	92%	86%	79%	71%	62%	53%	44%	36%	29%	22%	15%	10%	7%	3%	1%	1%	1%	of 0°val