

# VEROBOARD®

## ST0130KWH Horizontal LED Step Light

This 120V voltage recessed LED step light is ideal for walls or in steps. Recessed lights in those areas provide edge lighting that adds sleek sophistication to contemporary and modern staircases. The air gap between the housing can and the light fixture creates an insulating effect that keeps the outer can cooler.

### SPECIFICATIONS



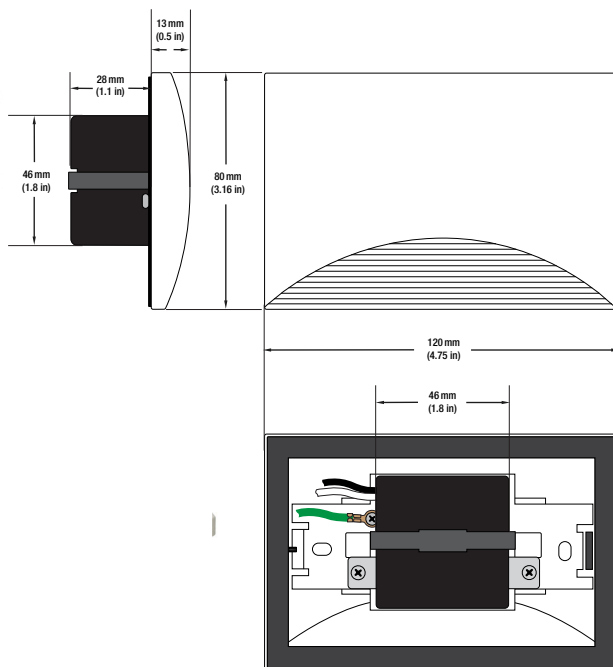
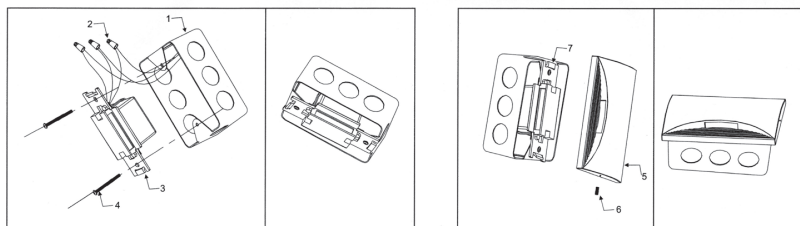
<b>Model</b>	ST0130KWH
<b>Voltage</b>	120V AC
<b>Wattage</b>	5W
<b>Color Temperature</b>	3000K (Warm White)
<b>Brightness</b>	75 Lumens
<b>Rendering Index</b>	CRI>90
<b>LED Type</b>	Integrated LED
<b>Engine Material</b>	PVC
<b>Face Plate Material</b>	Die-Cast Aluminum
<b>Face Plate Color</b>	White
<b>Rated Life</b>	50,000 Hours
<b>Beam Angle</b>	70°
<b>Dimmable</b>	Yes (Triac Dimming)
<b>Installation</b>	Outlet Box Recessed
<b>IP Rating</b>	IP65 (Wet Locations)
<b>Outer Dimensions</b>	120 x 80 x 13 mm x (4.7 x 3.16 x 0.5 in)
<b>Outlet Box Dimensions</b>	46 x 46 x 28 mm (1.8 x 1.8 x 1.1 in)
<b>Package Dimensions</b>	135 x 87 x 50 mm (5.3 x 3.4 x 2 in)
<b>Package Weight</b>	0.250 Kg
<b>Certification</b>	FCC/ETL/Energy Star/RoHS

Name: \_\_\_\_\_

Quantity: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_



### Included Content:

- 1x Step Light
- 1x Installation Instruction Manual
- 3x Wire Connectors
- 2x Mounting Screws
- 1x Hexagon Socket Screw
- 1x Allen Key



### Safety and Warning

The fixture must be wired in accordance with local and national electrical codes and standards. And all the installation must be done by a certified electrician. Please be sure the main power switch is OFF before the installation, inspection, or removal. It is strictly necessary to ground the outlet box properly. Furthermore, the integrated LEDs in the light fixture can not be replaced.



SKU: 666561426590

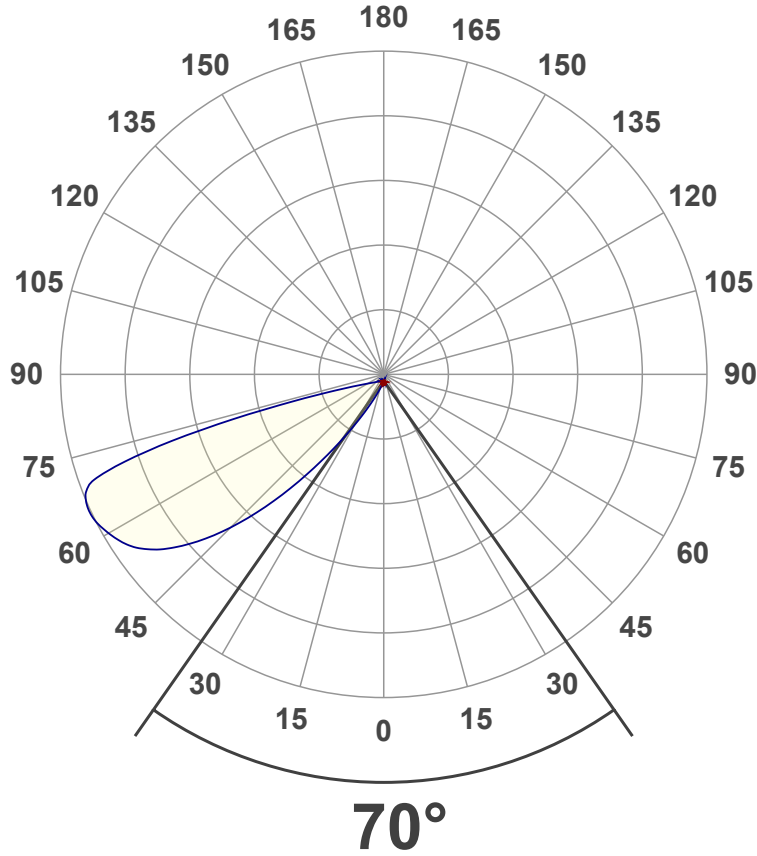
# Light Measurement Report

Print date: 2023-02-01

Measurement date and time: 2023-02-01 12:24:28 PM – Measurement no. VFR-230201-0035-MS

## Luminous Intensity diagram

Unit: 0-100% of peak intensity



## Main Values

Output (total Lumen)	75.0 lm
Lumen Up% / Down%	0.08% / 99.92%
Peak Intensity	58.4 cd
Beam Angle (50%)	70°
Beam Angle (90%)	32.9°
Beam Angle (10%)	108.1°

## Cut-off Angle

Average 2,5%	104°
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## Field Angle

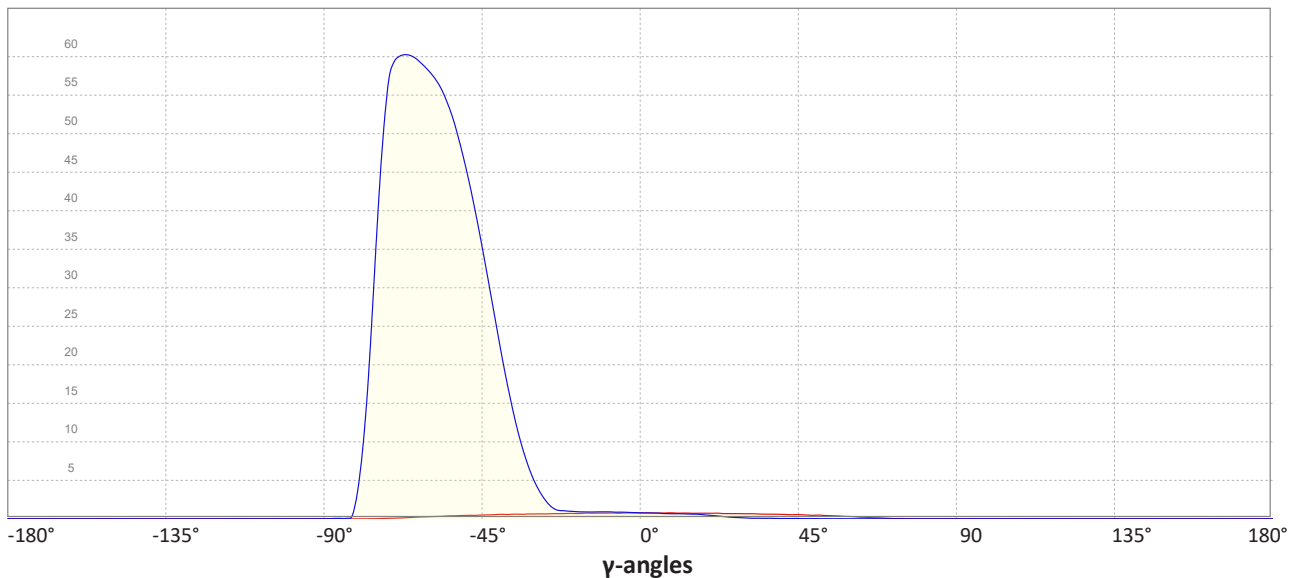
Average 10%	94.7°
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## Intensity Ratio

In 120° cone	47.7%
In 90° cone	12.3%

**C000-C180**  
**C090-C270**

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



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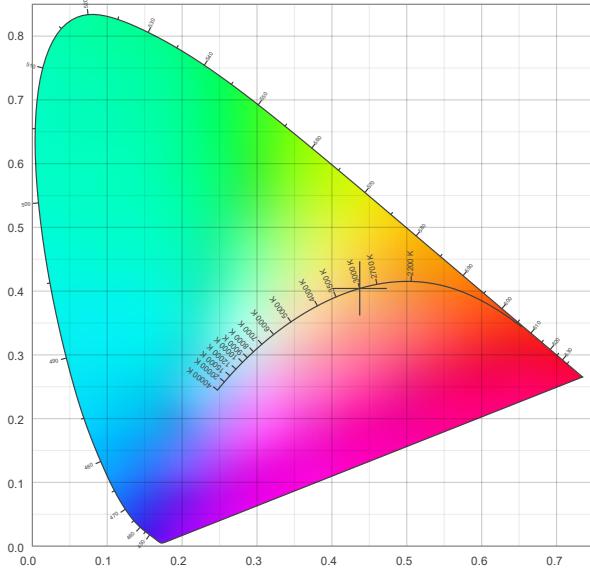
Measurement date and time: 2023-02-01 1:13:38 PM – Measurement no. VFR-230201-0038-MS

## Color details

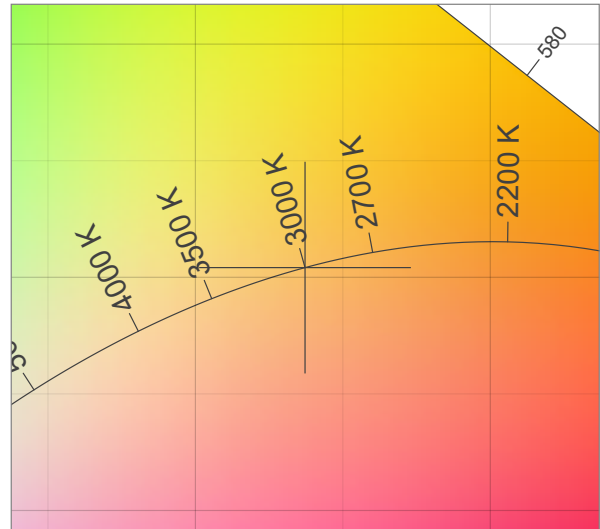
Correlated Color Temperature, Target CCT = 3000 K  
 Correlated Color Temperature, Measured CCT = 2825 K  
 Color Rendering Index CRI 92.2  
 Color Rendering Index, R9 (red component) R9 = 42.4  
 Color Rendering TM30-18 R<sub>f</sub> 89.6 – R<sub>g</sub> 101.3  
 Color Quality Scale CQS = 88.5

MacAdam Steps SDCM = 6.6  
 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 = -0.0032  
 Color coordinate CIEs 1976 (CIELUV) (u'';v'') = (0.251;0.251)

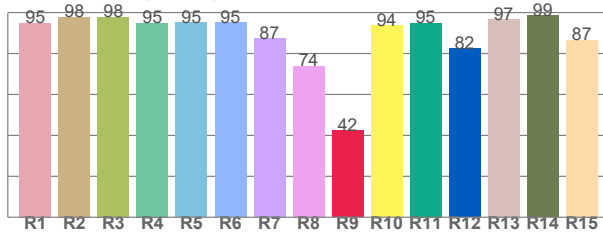
### CIE 1931



### CIE 1931 – zoomed on Planckian locus



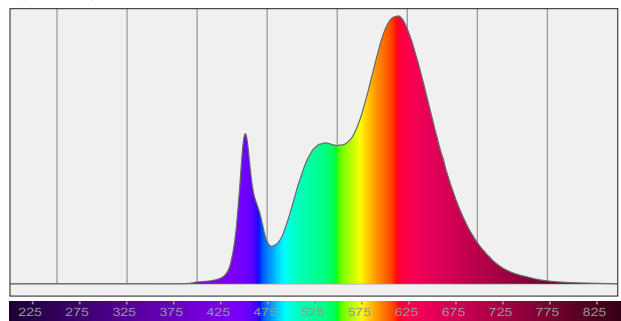
### Color Rendering Index per reference color (CIE 1995)



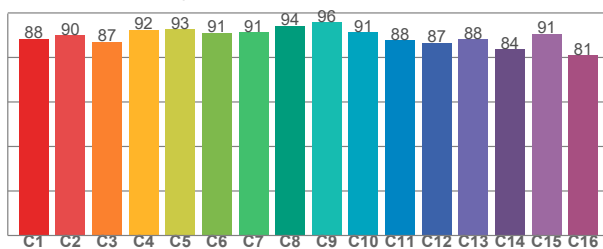
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95.0	97.8	97.9	95.0	95.3	95.1	87.4	74.0	42.4	93.8	95.0	82.4	96.7	98.5	86.6

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



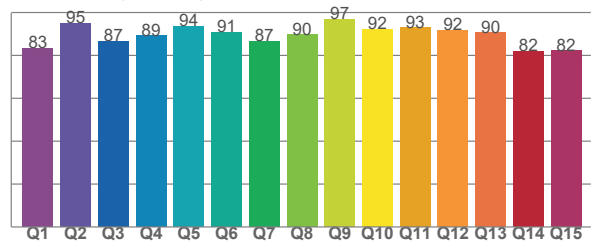
### TM30-18 Rf-values per hue bin



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
88.4	90.0	87.0	92.4	92.6	91.1	91.4	94.1	95.8	91.3	87.7	86.7	88.1	83.6	90.7	80.9

### Color Quality Scale by reference color



CQS Q values

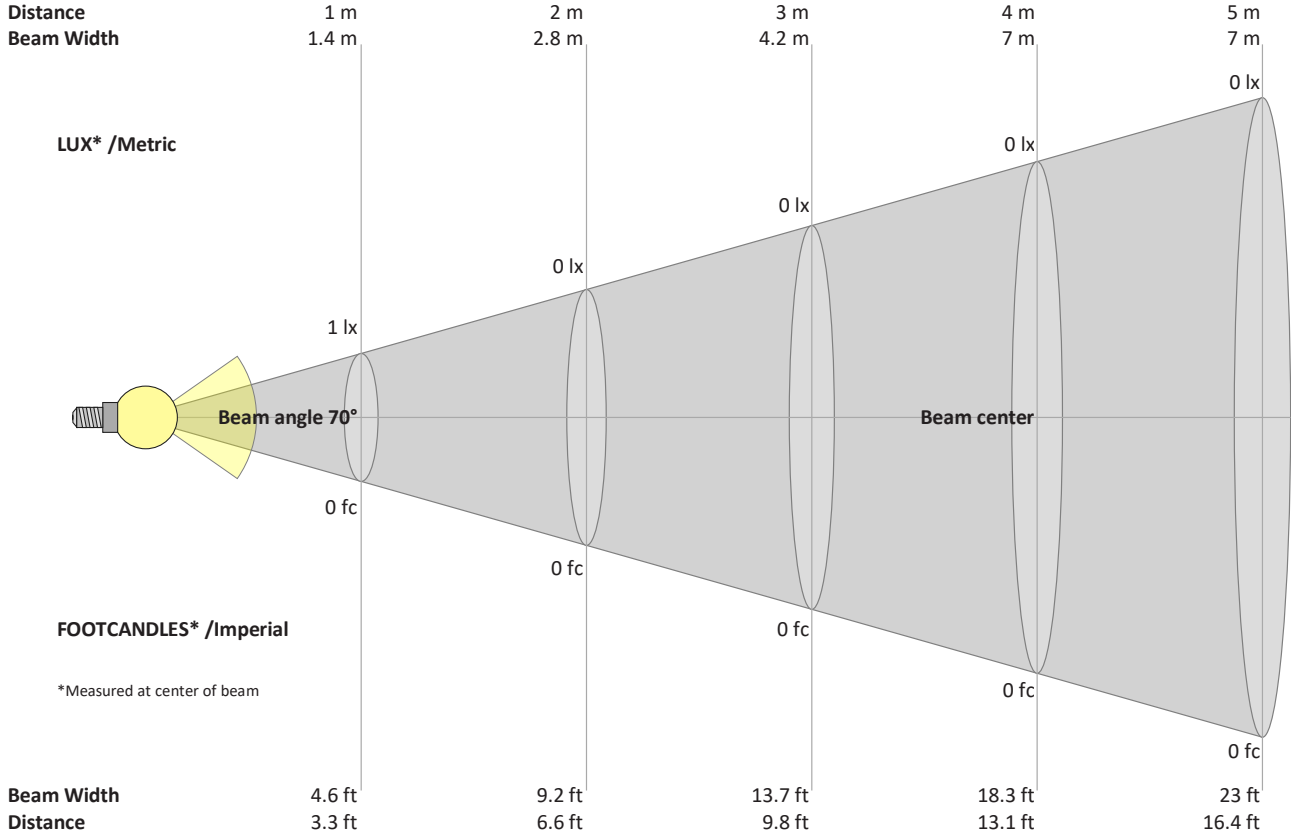
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
83.4	95.1	86.7	89.2	93.5	90.7	86.5	89.5	96.8	92.3	92.9	91.7	90.5	82.0	82.2

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## 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	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	lux
0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	fc

### Intensities in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°	y
0.748	0.740	0.736	0.708	0.733	0.721	0.718	0.712	0.708	0.674	0.685	0.662	0.657	0.629	0.620	0.611	0.608	0.582	0.584	0.550	cd
100%	99%	98%	95%	98%	96%	96%	95%	95%	90%	92%	89%	88%	84%	83%	82%	81%	78%	78%	73%	of 0°val

### Intensities in 90° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°	y
0.748	0.739	0.724	0.687	0.655	0.640	0.632	0.600	0.580	0.516	0.437	0.362	0.278	0.199	0.159	0.114	0.072	0.074	0.069	0.061	cd
100%	99%	97%	92%	88%	86%	85%	80%	78%	69%	58%	48%	37%	27%	21%	15%	10%	10%	9%	8%	of 0°val

### Intensities in 180° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°	y
0.748	0.746	0.737	0.730	0.748	0.730	0.720	0.714	0.704	0.709	0.704	0.713	0.662	0.660	0.661	0.639	0.637	0.602	0.588	0.581	cd
100%	100%	98%	98%	100%	98%	96%	95%	94%	95%	94%	95%	89%	88%	88%	85%	85%	80%	79%	78%	of 0°val

### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°	y
0.7	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.2	1.9	3.0	4.6	6.9	9.7	13.2	17.3	cd
100%	106%	110%	112%	115%	117%	117%	115%	116%	120%	128%	138%	160%	247%	400%	621%	916%	1292%	1767%	2319%	of 0°val