VEROBOARD®

LED Type: VBDFS-3528-5000-120-24-WP
Colour: 5000K

Contact Name: _____

Company: _____

Phone: _____

Email: _____

	Wattage	Brightness
Per Foot	3W/ft	256Lm/ft
Per Meter	9.6W/m	840Lm/m

RoHS

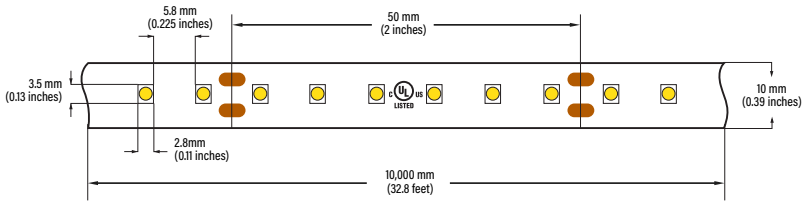
c UL us LISTED E514904

☐ 666561425289

DESCRIPTION

Flexible 10 mm wide linear LED strip. Available in 10 meter (32.8 feet) rolls that can be cut every 3 LEDs (50 mm or 2 in). The LED Strip lights are manufactured with high-quality materials and designed for professional lighting. Every strip light begins with a heavy-duty dual-core copper printed circuit board (PC Board), it is then soldered with an array of chips and color options. They can be cut to any size (marked interval points) and rejoined by soldering.

DIMENSIONS



SPECIFICATIONS

Model:	VBDFS-3528-5000-120-24-WP
Color Temperature:	5000K (Daylight)
LED Type:	3528 SMD
LED Qty:	120 LEDs per meter
LM/LED:	7-8 Lm per LED
Input Voltage (VF):	24V DC
Power:	9.6W Per meter (3W/ft)
Brightness:	840Lm/meter (256Lm/ft)
Lifespan:	>50,000 hours
PCB:	4oz PCB, Double-side, white colour 10mm width
IP Rating:	IP68 [Weatherproof]
Rendering Index (Ra):	CRI>95
Beam Angle:	120°
Dimmable:	Yes
Cut Size:	Every 6 LED chips (2 in)
Operating Temperature:	-15ºC to +40ºC
Dimensions:	10,000mm x 10mm (393.6in x 0.39in)
Certificates:	cUL/RoHs
Roll Length:	10 meter roll (32.8 feet)

ORDERING GUIDE

Example part number: **VBDFS - 3528 - 5000 - 120 - 24 - WP**

MODEL	SERIES	COLOUR	LEDs/METER	VOLTAGE	LENGTH
VBDFS	3528	5000	120	24V	XXXX

Custom Length

WP (Full Roll 10 Meter)

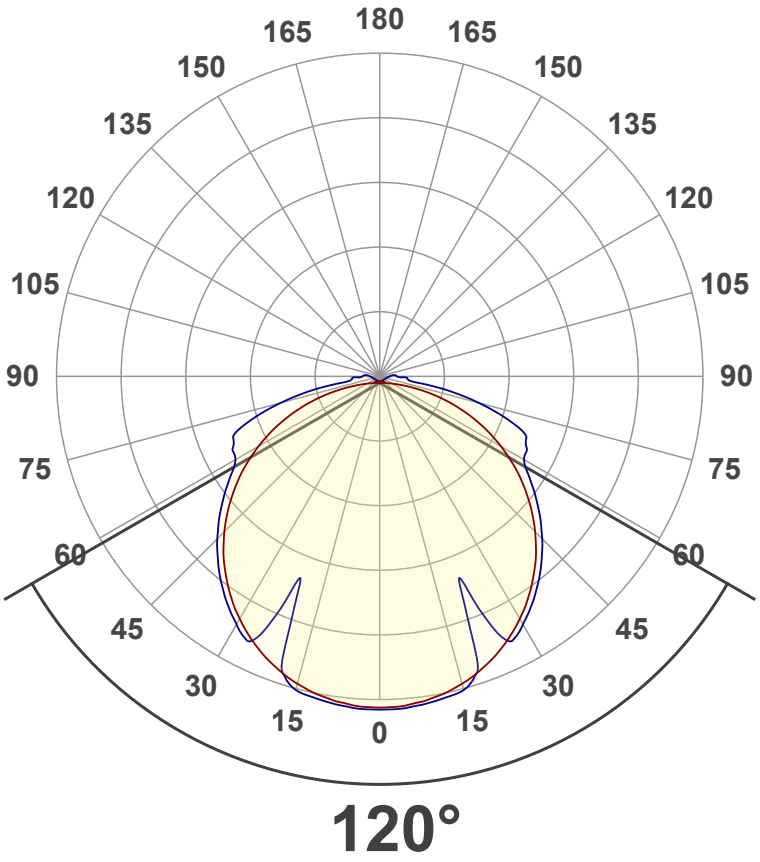
For more information about our products and services, please visit our website: **www.veroboard.com**

Light Measurement Report

Print date: 2023-05-02
Measurement date and time: 2023-05-02 12:01:55 PM – Measurement no. VFR-230502-0195-MS

VERO LAB POWERED BY VISO SYSTEMS

Luminous Intensity diagram Unit: 0-100% of peak intensity



Main Values

Lumen Up% / Down%	4.13% / 95.87%
Peak Intensity	16.1 cd
Beam Angle (50%)	120°
Beam Angle (90%)	132.5°
Beam Angle (10%)	116.5°

Cut-off Angle

Average 2,5%	213.4°

Field Angle

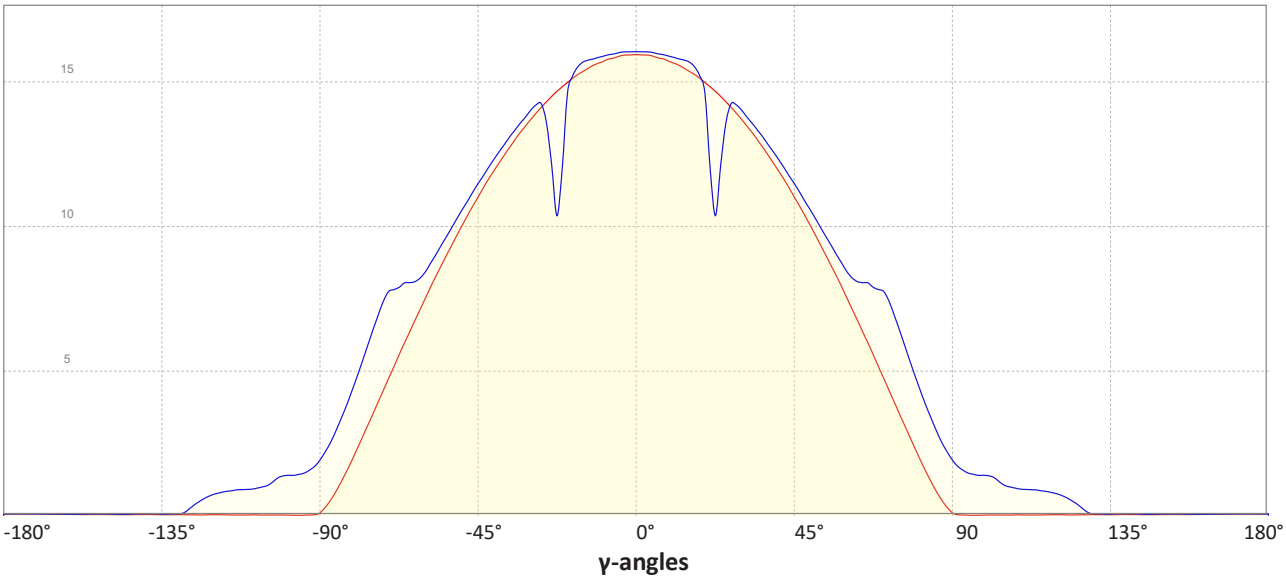
Average 10%	174.9°

Intensity Ratio

In 120° cone	69.0%
In 90° cone	45.8%

C000-C180
C090-C270

Linear distribution diagram - Intensity (candela) vs γ-angle



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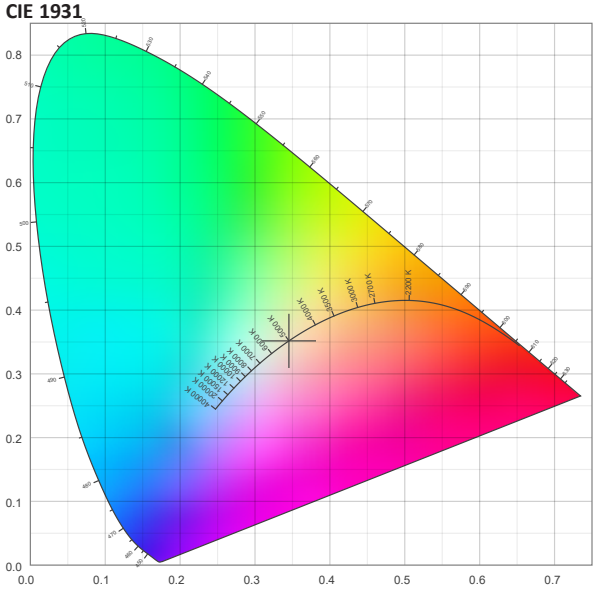
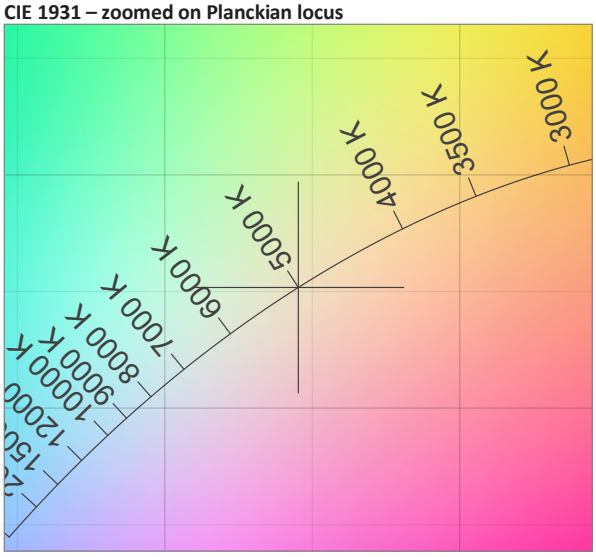
Color details

Correlated Color Temperature, Target	CCT = 5000 K
Correlated Color Temperature, Measured	CCT = 4978 K
Color Rendering Index	CRI 96.7
Color Rendering Index, R9 (red component)	R9 = 98.1
Color Rendering TM30-18	R_f 92.3 – R_g 99.4
Color Quality Scale	CQS = 93.7
MacAdam Steps	SDCM = 2.6
Color coordinates CIE 1931	(x;y) = (0.345;0.352)
Color coordinate CIEs 1960	(u;v) = (0.211;0.323)
Color deviation from BBL	Duv = 0.0010
Color coordinate CIEs 1976 (CIELUV)	(u';v') = (0.211;0.211)

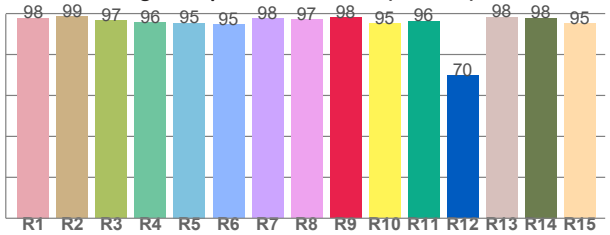
CIE 1931



CIE 1931 – zoomed on Planckian locus



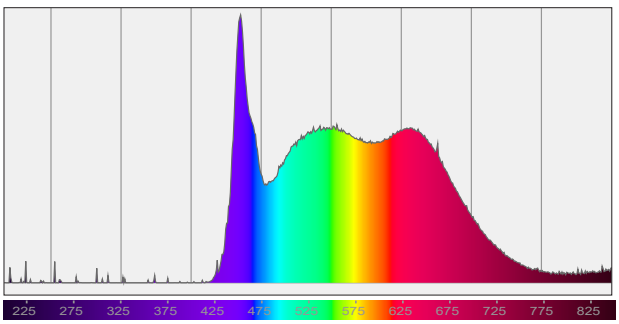
Color Rendering Index per reference color (CIE 1995)



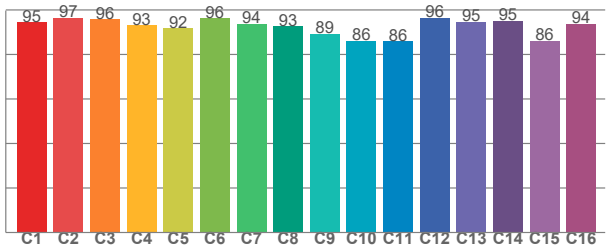
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
97.8	98.7	96.5	95.7	95.3	94.7	97.5	97.1	98.1	95.0	96.3	69.7	98.4	97.8	95.3

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



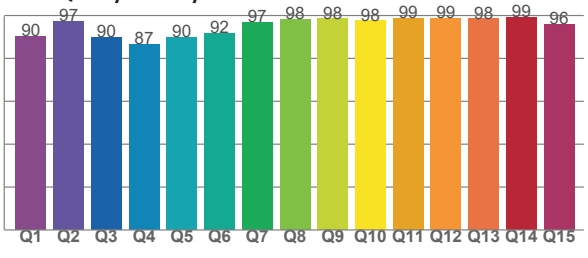
TM30-18 Rf-values per hue bin



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
94.5	96.6	95.9	93.0	91.8	96.2	93.8	92.8	89.2	86.3	86.0	96.4	94.6	95.0	86.1	93.7

Color Quality Scale by reference color



CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
90.4	97.4	89.7	86.7	89.9	91.8	96.8	98.2	98.4	97.6	98.7	98.6	98.5	99.1	95.8

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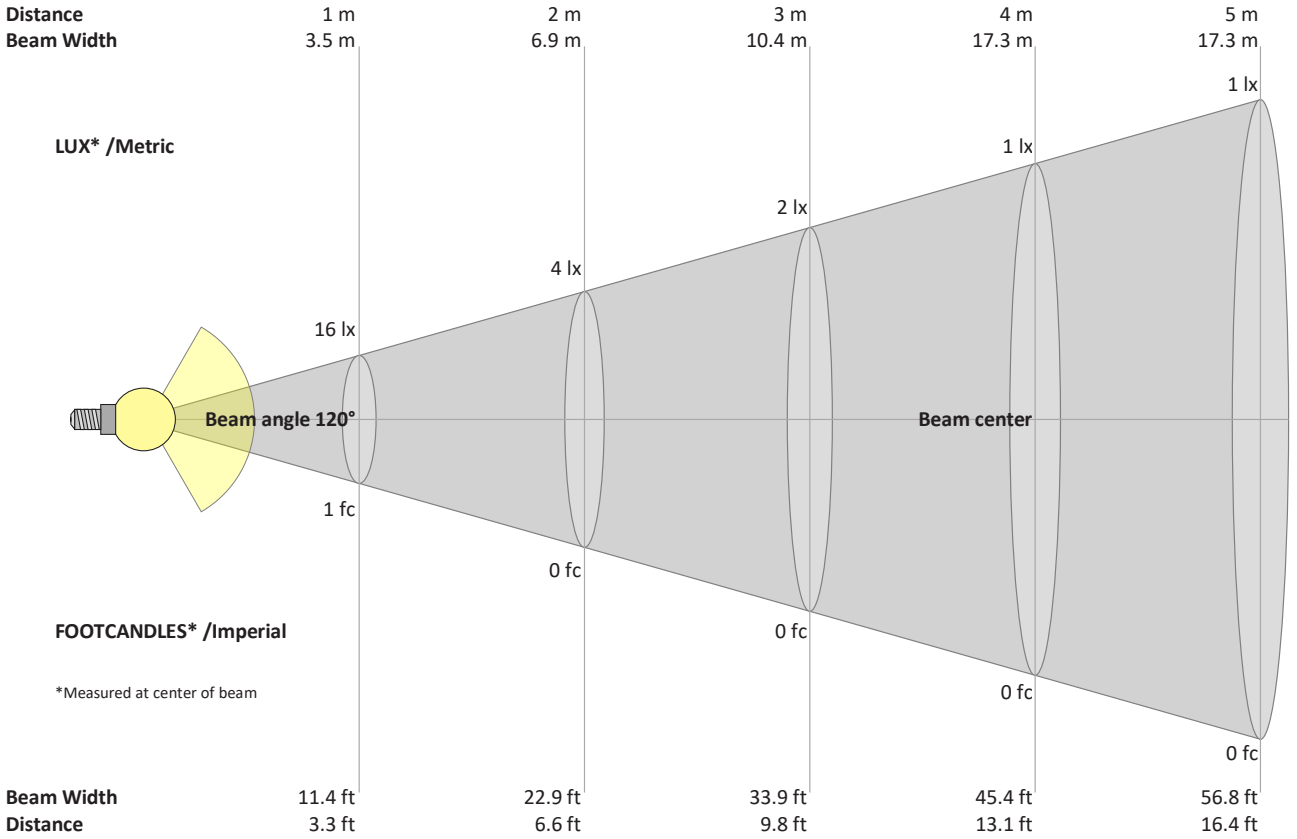
Beam Details



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
16	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	lux
1.5	0.4	0.2	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	fc

Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
16.0	15.9	15.7	15.4	14.9	14.4	13.7	12.9	12.0	11.0	9.9	8.8	7.5	6.2	4.9	3.5	2.2	0.9	0.1	0.0	cd
100%	99%	98%	96%	93%	90%	86%	81%	75%	69%	62%	55%	47%	39%	30%	22%	14%	6%	1%	0%	of 0°val

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
16.0	16.0	15.9	15.7	13.8	13.1	14.0	13.3	12.4	11.5	10.5	9.5	8.4	8.1	7.8	6.4	4.6	3.1	1.9	1.5	cd
100%	100%	99%	98%	87%	82%	88%	83%	78%	72%	66%	59%	53%	50%	49%	40%	29%	19%	12%	9%	of 0°val

Intensities in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
16.0	15.9	15.7	15.4	14.9	14.4	13.7	12.9	12.0	11.0	9.9	8.8	7.5	6.2	4.9	3.5	2.2	0.9	0.1	0.0	cd
100%	99%	98%	96%	93%	90%	86%	81%	75%	69%	62%	55%	47%	39%	30%	22%	14%	6%	1%	0%	of 0°val

Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
16.0	16.0	15.9	15.7	13.8	13.1	14.0	13.3	12.4	11.5	10.5	9.5	8.4	8.1	7.8	6.4	4.6	3.1	1.9	1.5	cd
100%	100%	99%	98%	87%	82%	88%	83%	78%	72%	66%	59%	53%	50%	49%	40%	29%	19%	12%	9%	of 0°val