

VEROBOARD®

LED Type: VBDFS-2835-XXXX-240-24-NS
Colour: 2700K • 3000K • 3500K • 4000K • 5000K • 6000K

Contact Name: _____

Company: _____

Phone: _____

Email: _____

	Wattage	Brightness
Per Foot	9W/ft	1463-1609Lm/ft
Per Meter	28.8W/m	4800-5280Lm/m



DESCRIPTION

Flexible 12 mm wide linear LED strip. Available in 5 meter (16.4 feet) rolls that can be cut every 6 LEDs (25 mm or 1 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), which is then soldered with an array of chips and color options. Moreover, the strip lights come with a strong 3M adhesive backing. They can be cut to any size (marked interval points) and rejoined by soldering.

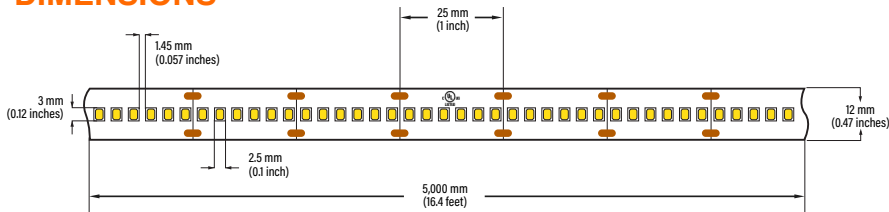


666561420048 666561420055 666561420086



666561420093 666561420109 666561420116

DIMENSIONS



SPECIFICATIONS

Model:	VBDFS-2835-xxxx-240-24-NS
Color Temperature:	2700K • 3000K • 3500K • 4000K • 5000K • 6000K
LED Type:	2835 SMD
LED Qty:	240 LEDs per meter
LM/LED:	20-22 Lm per LED
Input Voltage (VF):	24V DC
Power:	28.8W per meter (9W/ft)
Brightness:	4800-5280 Lm/meter (1463-1609 Lm/ft)
Lifespan:	>50,000 hours
PCB:	4oz PCB, Double-side, white colour 12mm width
IP Rating:	IP20 (Indoor use only)
Rendering Index (Ra):	CRI>95
Beam Angle:	120°
Dimmable:	Yes
Cut Size:	Every 6 LED chips (1")
Operating Temperature:	-15°C to +40°C
Dimensions:	5,000mm x 12mm x 1mm (196.8" x 0.47" x 0.03")
Certificates:	UL / RoHs
Roll Length:	5 meter roll (16.4ft)



ORDERING GUIDE

Example part number: **VBDFS - 2835 - XXXX - 240 - 24 - NS**

MODEL	SERIES	COLOUR	LEDS/METER	VOLTAGE	LENGTH
VBDFS	2835	XXXX	240	24V	XXXX
		2700K 4000K 3000K 5000K 3500K 6000K			Custom Length
					NS (Full Roll 5 Meter)

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

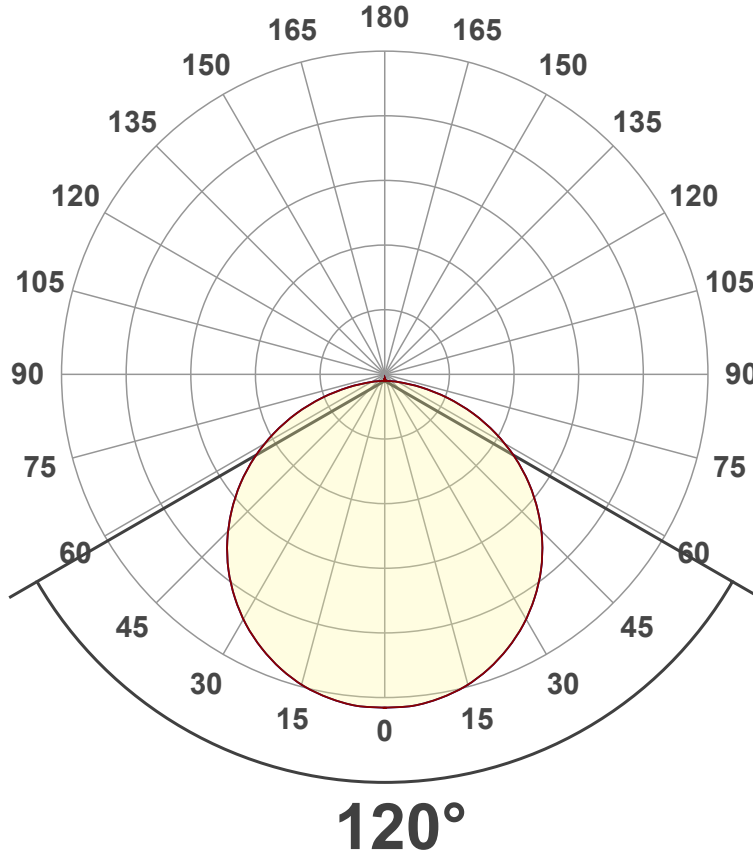
Light Measurement Report

Print date: 2023-04-28

Measurement date and time: 2023-04-28 2:13:07 PM – Measurement no. VFR-230428-0189-MS

Luminous Intensity diagram

Unit: 0-100% of peak intensity



Main Values

Lumen Up% / Down%	0.68% / 99.32%
Peak Intensity	60.5 cd
Beam Angle (50%)	120°
Beam Angle (90%)	116°
Beam Angle (10%)	116°

Cut-off Angle

Average 2,5%	175°
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Field Angle

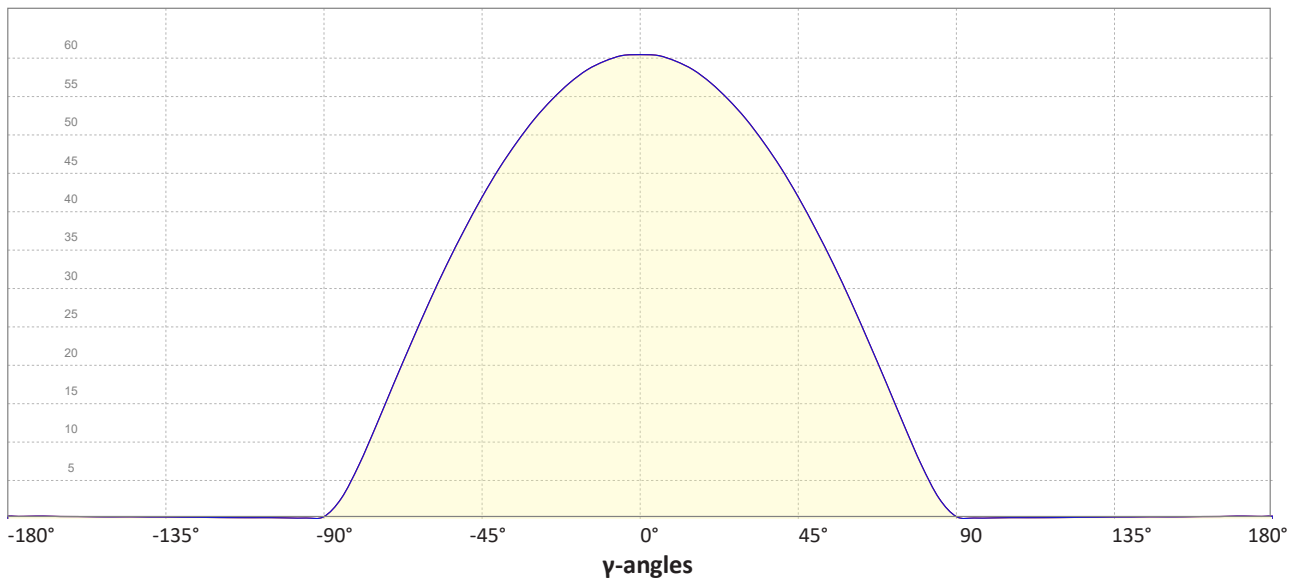
Average 10%	162.3°
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Intensity Ratio

In 120° cone	77.6%
In 90° cone	52.3%

C000-C180
C090-C270

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



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Color details

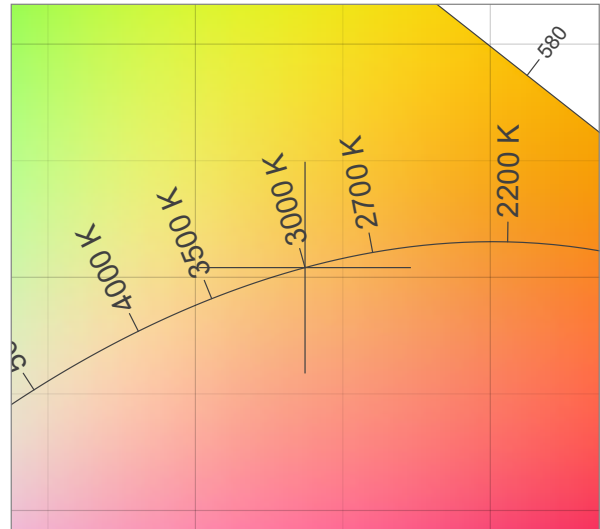
Correlated Color Temperature, Target CCT = 3000 K
 Correlated Color Temperature, Measured CCT = 2951 K
 Color Rendering Index CRI 96.7
 Color Rendering Index, R9 (red component) R9 = 97.7
 Color Rendering TM30-18 R_f 94.6 – R_g 101.8
 Color Quality Scale CQS = 95.7

MacAdam Steps
 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 = -0.0037
 Color coordinate CIEs 1976 (CIELUV) (u'';v'') = (0.251;0.251)

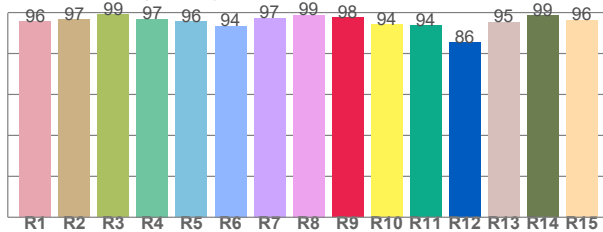
CIE 1931



CIE 1931 – zoomed on Planckian locus



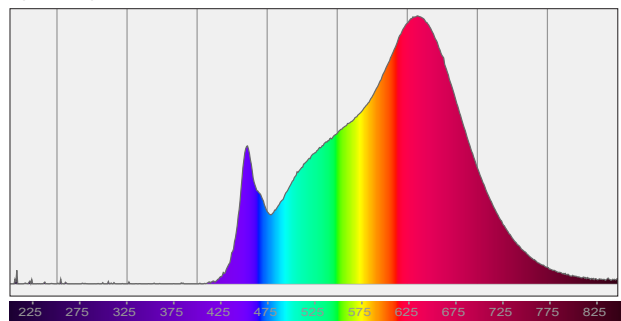
Color Rendering Index per reference color (CIE 1995)



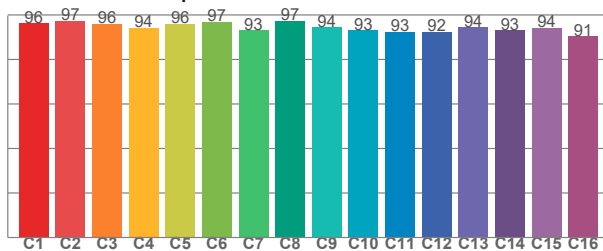
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95.7	96.6	98.9	96.9	95.7	93.5	97.4	98.8	97.7	94.3	93.6	85.5	95.4	98.6	96.5

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



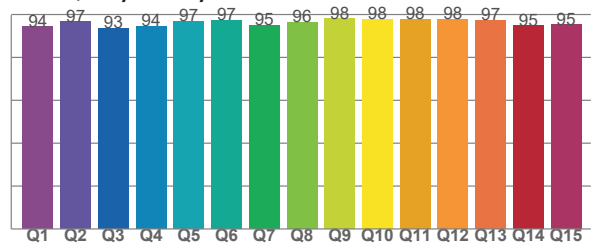
TM30-18 Rf-values per hue bin



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
96.2	97.4	96.1	94.2	96.1	97.0	93.2	97.4	94.5	93.1	92.6	92.4	94.4	93.1	94.2	90.5

Color Quality Scale by reference color



CQS Q values

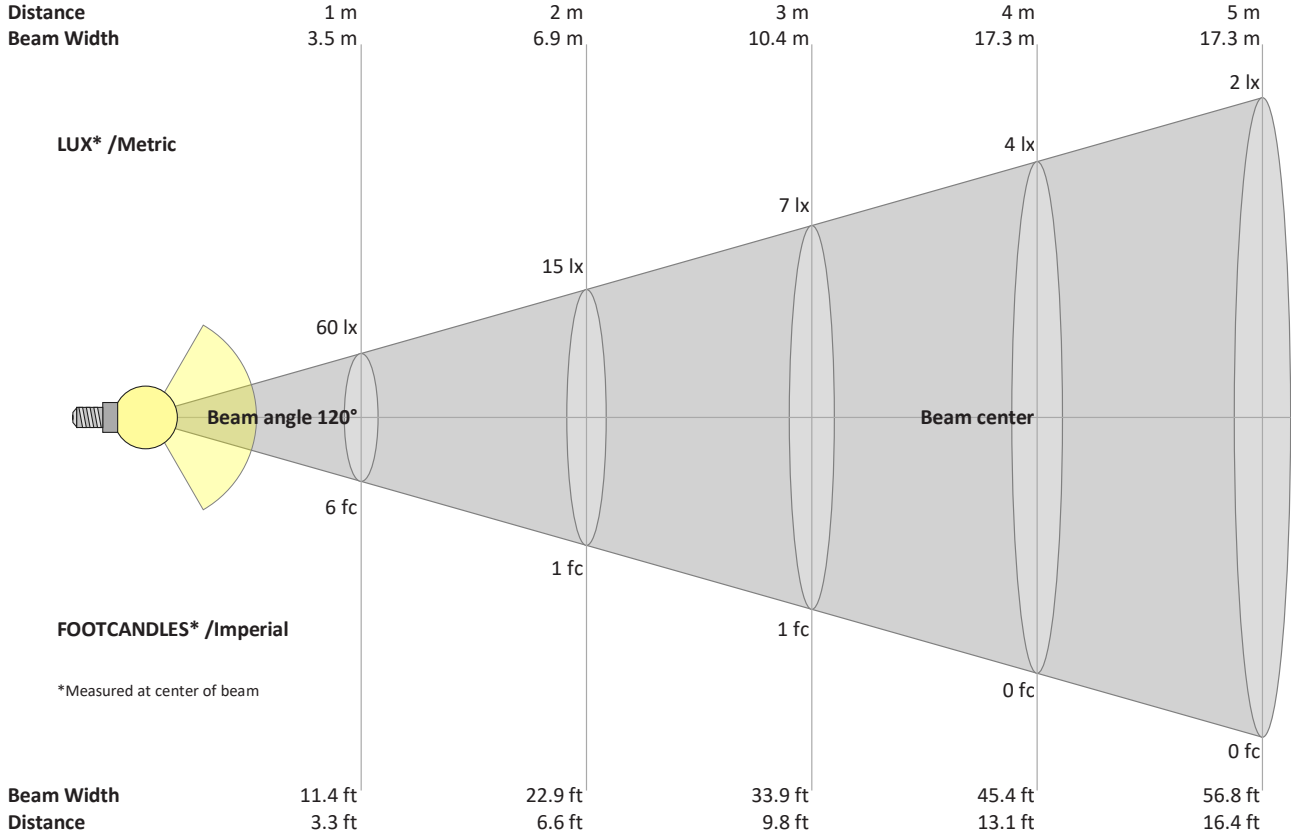
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94.4	96.6	93.5	94.4	96.8	97.2	94.9	96.3	98.0	97.7	97.8	97.8	97.3	94.8	95.2

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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
60	15	7	4	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	lux
5.6	1.4	0.6	0.4	0.2	0.2	0.1	0.1	0.1	0.1	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°	y
60.5	60.3	59.6	58.5	56.8	54.6	52.1	49.1	45.7	41.9	37.7	33.2	28.3	23.1	17.7	12.3	7.1	2.7	0.3	0.1	cd
100%	100%	99%	97%	94%	90%	86%	81%	76%	69%	62%	55%	47%	38%	29%	20%	12%	4%	0%	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°	y
60.5	60.3	59.6	58.5	56.8	54.6	52.1	49.1	45.7	41.9	37.7	33.2	28.3	23.1	17.7	12.3	7.1	2.7	0.3	0.1	cd
100%	100%	99%	97%	94%	90%	86%	81%	76%	69%	62%	55%	47%	38%	29%	20%	12%	4%	0%	0%	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°	y
60.5	60.3	59.6	58.5	56.8	54.6	52.1	49.1	45.7	41.9	37.7	33.2	28.3	23.1	17.7	12.3	7.1	2.7	0.3	0.1	cd
100%	100%	99%	97%	94%	90%	86%	81%	76%	69%	62%	55%	47%	38%	29%	20%	12%	4%	0%	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°	y
60.5	60.3	59.6	58.5	56.8	54.6	52.1	49.1	45.7	41.9	37.7	33.2	28.3	23.1	17.7	12.3	7.1	2.7	0.3	0.1	cd
100%	100%	99%	97%	94%	90%	86%	81%	76%	69%	62%	55%	47%	38%	29%	20%	12%	4%	0%	0%	of 0°val