

VEROBOARD®

Job Name: _____

Distributor: _____

Type: _____

4" Multiple Application Recessed Downlight

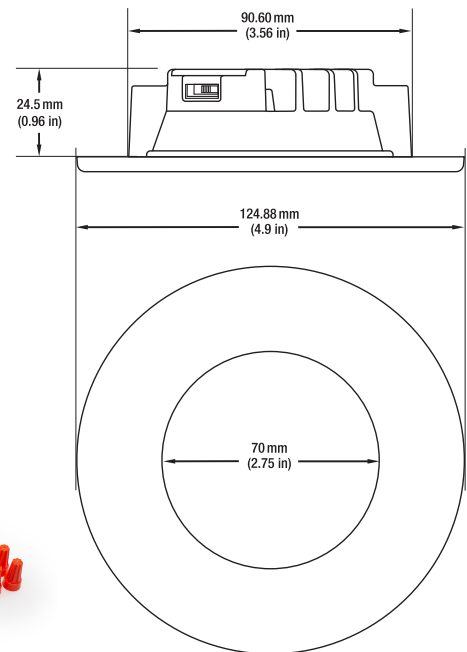


Add on Trims: Black Brushed Nickel

Veroboard 4-inch recessed retrofit kits are driverless downlights. They are designed for multiple applications including, wet locations. They can be directly recessed in a ceiling, installed into an existing 4-inch housing can, or new construction applications. It features interchangeable trims in white, black, and brushed nickel. They easily snap to the installed downlight. The downlight is available in 5 CCT in which one can select the desired color temperature from 2700K-3000K-3500K-4000K-5000K.

SPECIFICATIONS

Engine Model No:	LED-S8W-5CCTWH-MT
Voltage:	120V AC
Wattage:	8W
Color Temperature:	5CCT Selectable Color Temperature (2700K-3000K-3500K-4000K-5000K)
Dimmable:	Yes
Brightness:	500 Lumens
Rendering Index:	CRI>90
Rated Life:	50,000 Hours
Installation:	Semi-Recessed/Recessed Housing Installation
Electrical Connection:	Screw Connector, E26/E27
Engine Material:	Die-Cast Aluminum
Trim Material:	Galvanized Steel
Beam Angle:	120°
IP Rating:	Suitable for Dry, Damp and Wet Locations
Outer Dimensions:	Ø 124.88mm (3.56") x Depth 24.5mm (1.25")
Included Content:	LED Panel Engine with WHITE TRIM ONLY*
Included Accessories:	M4 Screws with Silicone Washer, Installation Manual
Package Dimensions:	14cm x 14cm x 5.7cm (5.5" x 5.5" x 2.25")
Package Weight:	0.354 Kg
Certification:	FCC/ETL/RoHS/Energy Star



Selectable Color Temperature Switch



Black AD-IMT-BK
SKU: 666561425067

Brushed Nickel AD-IMT-BN
SKU: 66656145074



VBD-4-RTF
SKU: 666561425081

* Black and brushed nickel trims sold separately.

Safety and Warning

The fixture must be wired in accordance with local electrical codes. All the installation must be done by a certified electrician. Please be certain the main power switch is OFF before the installation or attempting any maintenance.



SKU: 666561425050

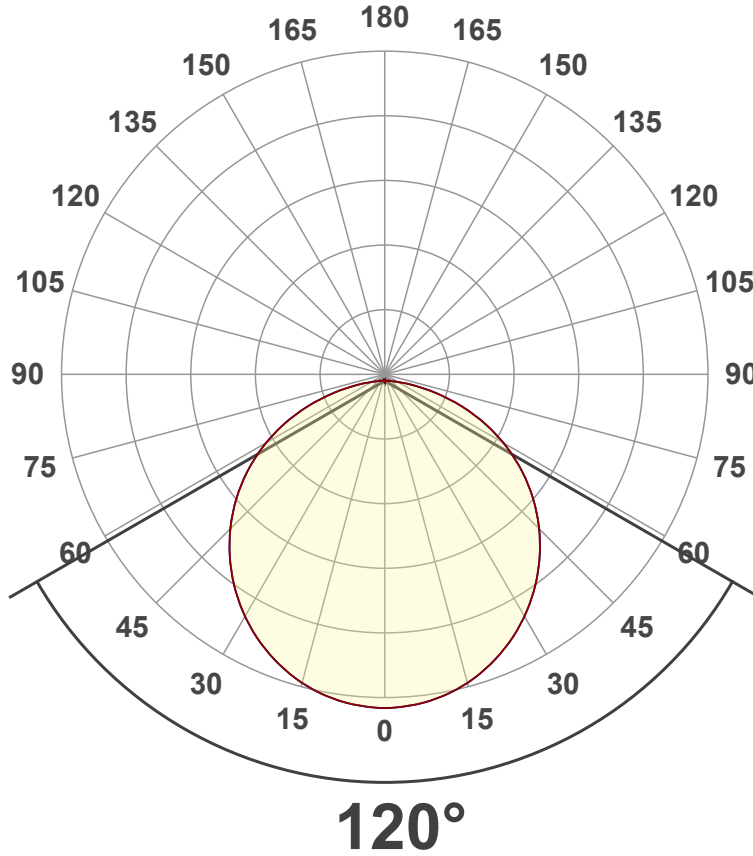
Light Measurement Report

Print date: 2023-01-09

Measurement date and time: 2023-01-09 9:45:12 AM – Measurement no. VFR-230109-0061-MS

Luminous Intensity diagram

Unit: 0-100% of peak intensity



Main Values

Output (total Lumen)	500 lm
Lumen Up% / Down%	0.1% / 99.9%
Peak Intensity	171 cd
Beam Angle (50%)	120°
Beam Angle (90%)	115.3°
Beam Angle (10%)	115.3°

Cut-off Angle

Average 2,5%	174.5°
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Field Angle

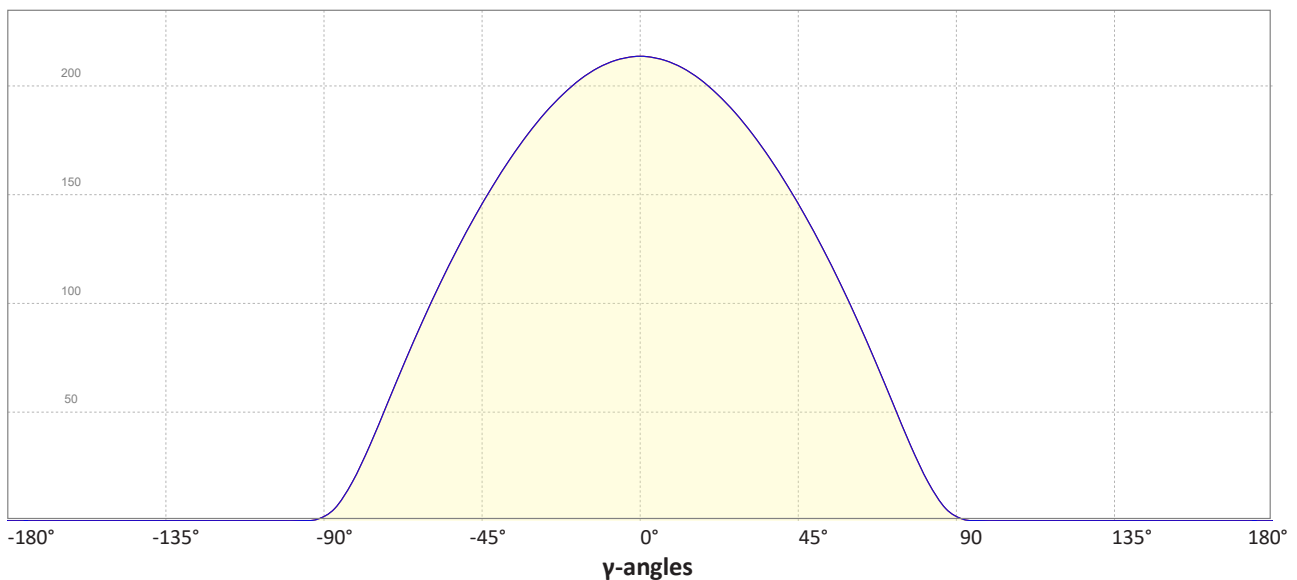
Average 10%	161.8°
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Intensity Ratio

In 120° cone	78.2%
In 90° cone	52.7%

C000-C180
C090-C270

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



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Color details

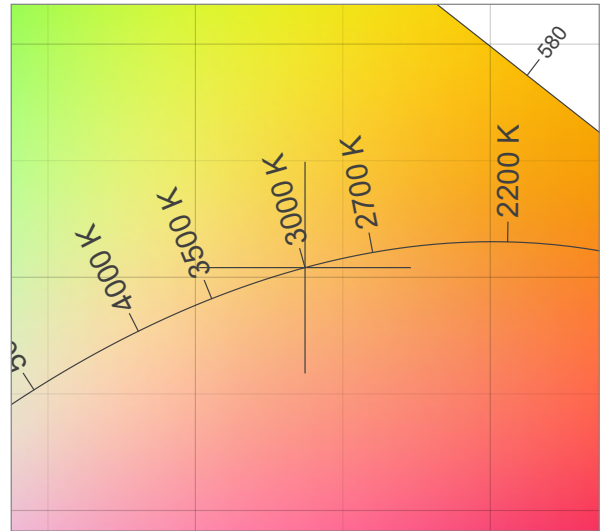
Correlated Color Temperature, Target CCT = 3000 K
 Correlated Color Temperature, Measured CCT = 2968 K
 Color Rendering Index CRI 93.3
 Color Rendering Index, R9 (red component) R9 = 69.4
 Color Rendering TM30-18 R_f 90.1 – R_g 97.3
 Color Quality Scale CQS = 92.0

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 = -0.0033
 Color coordinate CIEs 1976 (CIELUV) (u'';v'') = (0.251;0.251)

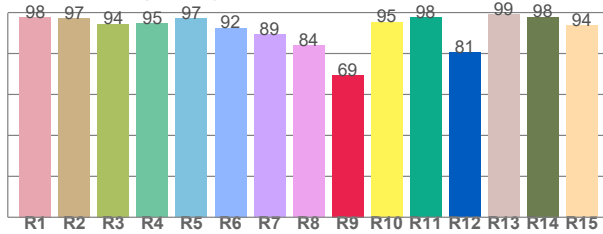
CIE 1931



CIE 1931 – zoomed on Planckian locus



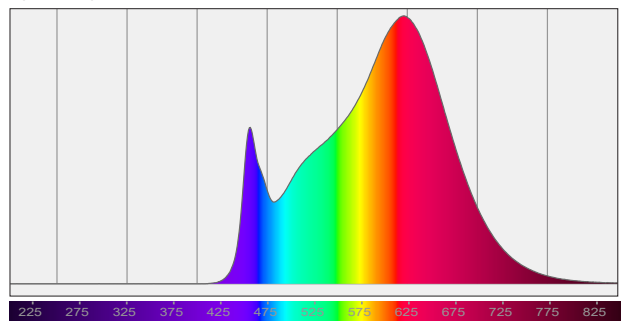
Color Rendering Index per reference color (CIE 1995)



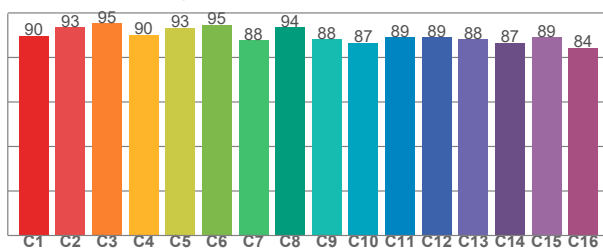
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
97.7	97.2	94.4	94.7	97.0	92.5	89.2	83.9	69.4	95.4	97.6	80.6	99.2	97.9	93.8

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



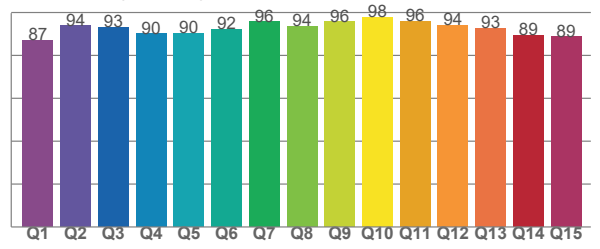
TM30-18 Rf-values per hue bin



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
89.7	93.5	95.3	90.3	93.5	94.6	87.8	93.7	88.1	86.7	89.2	89.1	88.3	86.7	89.0	84.4

Color Quality Scale by reference color



CQS Q values

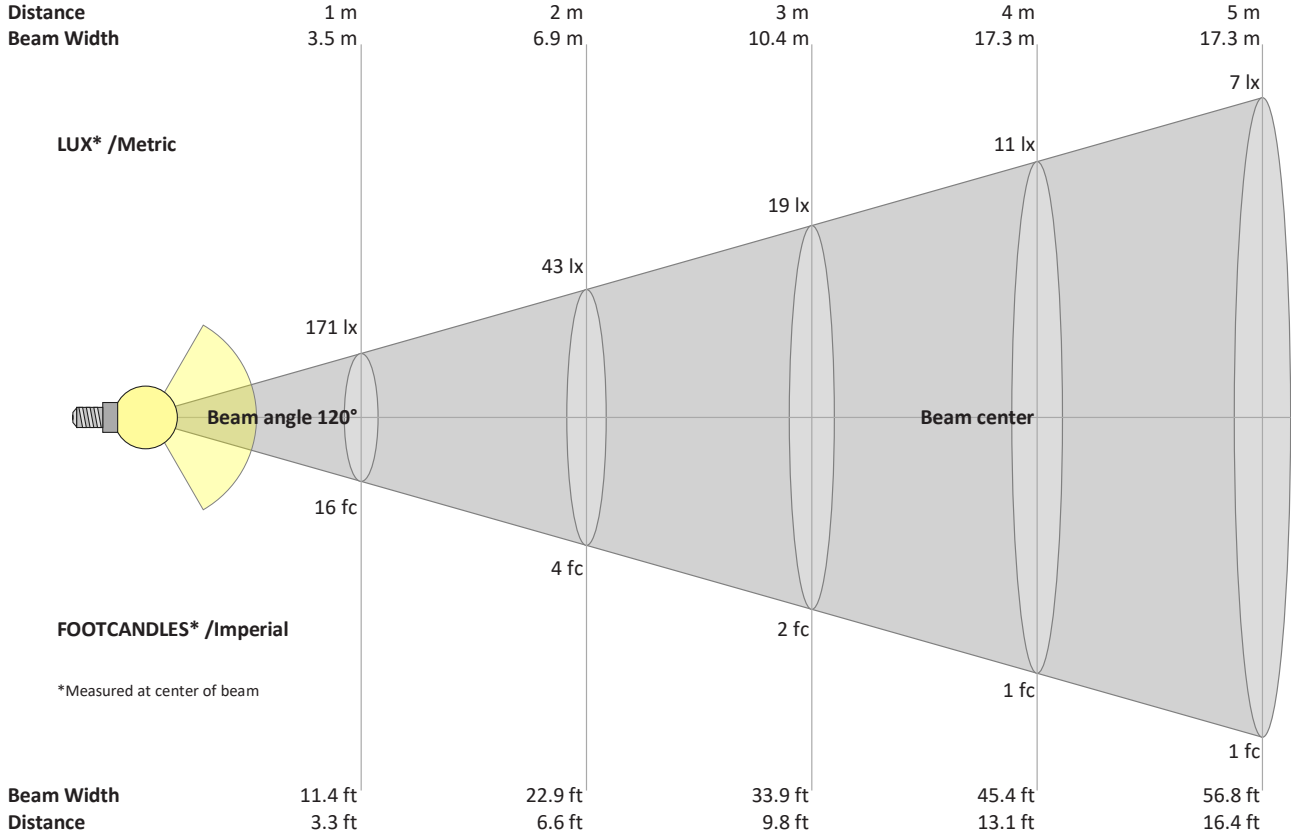
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
87.1	93.8	93.2	90.1	90.2	92.2	95.7	93.7	95.6	97.9	95.9	94.0	92.6	89.4	88.7

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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
171	43	19	11	7	5	3	3	2	2	1	1	1	1	1	1	1	1	0	0	lux
15.8	4	1.8	1	0.6	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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
171	170	168	164	159	153	145	137	127	116	105	92	79	64	49	34	19	8	2	0	cd
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	54%	46%	38%	29%	20%	11%	5%	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°	y
171	170	168	164	159	153	145	137	127	116	105	92	79	64	49	34	19	8	2	0	cd
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	54%	46%	38%	29%	20%	11%	5%	1%	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
171	170	168	164	159	153	145	137	127	116	105	92	79	64	49	34	19	8	2	0	cd
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	54%	46%	38%	29%	20%	11%	5%	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°	y
171	170	168	164	159	153	145	137	127	116	105	92	79	64	49	34	19	8	2	0	cd
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	54%	46%	38%	29%	20%	11%	5%	1%	0%	of 0°val