

KETRA

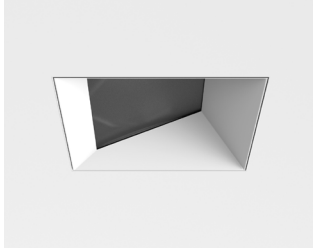
D3 WALL WASH, SQUARE

Type: _____
 Project: _____
 Comments: _____
 Prepared By: _____

Flanged



Mud-in



Tunable, fixture produces a wide range of 90+ CRI/R9 whites from 1400K-10,000K, as well as pastels and saturated colors

Closed-loop color point maintenance to <1 MacAdam ellipse over lifetime and temperature

Integrated temperature protection maintains safe operating conditions

Wirelessly dimmable to 0.1%

On-board wireless control enables individual addressability and control

HARDWARE ORDERING GUIDE

HOUSING



Product Line

Fixture & Trim



BT

WW



NCIC

SP

Wattage

Platform & Control

Beam Angle

Voltage & Region

Housing Type

Shipping Option

Example **Housing** Order Code: **CM****D3WWSQ****09****BT****WW****11****NCIC****SP**

Product Line	Code	Beam Angle	Code
Commercial	CM	Wall Wash	WW
Residential (Homeworks compatible)	HW		
Fixture & Trim		Voltage & Region	
D3 Wall Wash, Square	D3WWSQ	120VAC 60Hz, North America	11
D3 Wall Wash, Square Mud-in	D3WWSM	277VAC 60 Hz, North America	12
Wattage		Housing Type	
9 Watts	09	New Construction, IC/Airtight	NCIC
13 Watts	13	Shipping Option	
18 Watts	18	Single Pack	SP
Platform & Control		<small>(Default, ships with Butterfly Brackets & 24" Nailer Bars to be installed in field)</small>	
Wide Gamut, Tunable	BT		

TRIM



Model

Trim Color

W

Trim Accessory

Example **Trim** Order Code: **D3TFSW1****WH****W**

Model	Code
D3 Square Wall Wash	D3TFSW1
D3 Square Flangeless Wall Wash	D3TXSW1
Trim Color	
White	WH
Black	BK
Trim Accessory ¹	
Wall Wash	W

¹ Downlight is wet location rated.

SPECIFICATIONS¹

OPTICAL & ELECTRICAL PERFORMANCE

Delivered Lumen Output²

Beam Angle (1" recess)	9W	13W	18W
Wall Wash	414lm	573lm	705lm

CRI (Ra)³ >90 (R9>90) 2400K-5000K TYP

Lumen Maintenance⁴ 50,000 hours to L70 @ 25°C T_A

Color Spatial Uniformity³ <2 MacAdam ellipses across field angle

Color Point Range⁴ 1400°K-10,000°K, Fully Saturated, & Pastel

Equivalent Traditional Lamp 75W halogen

Dimming Range⁴ 0.1-100%lm

Power consumption
D3.09 9W
D3.13 13W
D3.18 18W

Voltage
120VAC 60Hz
277VAC 60Hz

Power Factor >0.9

Inrush Current⁵ 800mA, 0.2 ms duration

Delivered Efficacy

Beam Angle	9W	13W	18W
Wall Wash	46lm/W	44lm/W	39lm/W

Surge Protection 2.5KV

Control Protocol KetraNet Mesh

ENVIRONMENTAL

Operating Temperature (T_A) 0 - 40°C

Storage Temperature -20 - 80°C

Humidity 0 - 95%, Non-condensing

Certification UL, cUL, 120V: FCC Class B, 277V: FCC Class A

Location UL Wet Location

MECHANICAL

Mounting Options	Hanger Bars/ Butterfly Brackets
Field Replaceable Optics	Yes
Field Replaceable Light Engine	Yes
Field Replaceable Power Supply	Yes
Housing Material	Powder Coated Steel, Polymer
Lens Material	Glass

DIMENSIONS

Ceiling Square Cut-out	4" Flanged; 5.5" Mud-in
Trim Outside Dimension	4.63" Flanged; 3.75" Mud-in
Trim Thickness	1/16"
Optics Outside Dimension	2.5"
Trim Depth	1"
Ceiling Thickness	0.625" - 1.5"
Aiming	Tilt Fixed at 20° 364° Rotation
Service Position	Tilt to 40° Full 364° Rotation
Emitter Vertical Adjustment (tool-free)	0.75"
Housing Vertical Adjustment via Butterfly Bracket	1.75"
Housing Height	3.50"
Housing Length	18.38"
Housing Width	10"
Unit Weight	7.75 lb

¹ All performance measurements taken with 1" trim, with light engine at nadir at the low regress position, at 3000K, 25°C ambient, 100% power input, unless otherwise stated.

² Lumen measurement complies with IES LM-79-08 testing procedures.

³ Lumen maintenance values calculated in accordance to TM-21 procedures based on LM-80 compliant measurement data.

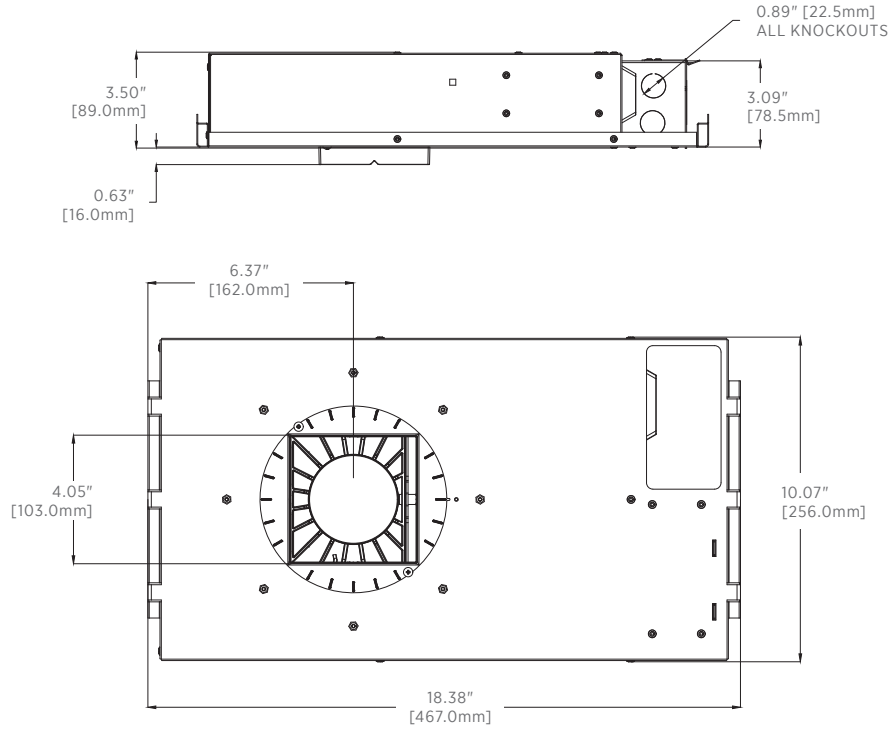
⁴ Intensity and color point controlled via Ketra's wireless network.

⁵ For more information on inrush current, refer to Ketra's Inrush App Note in the Support section of our website.

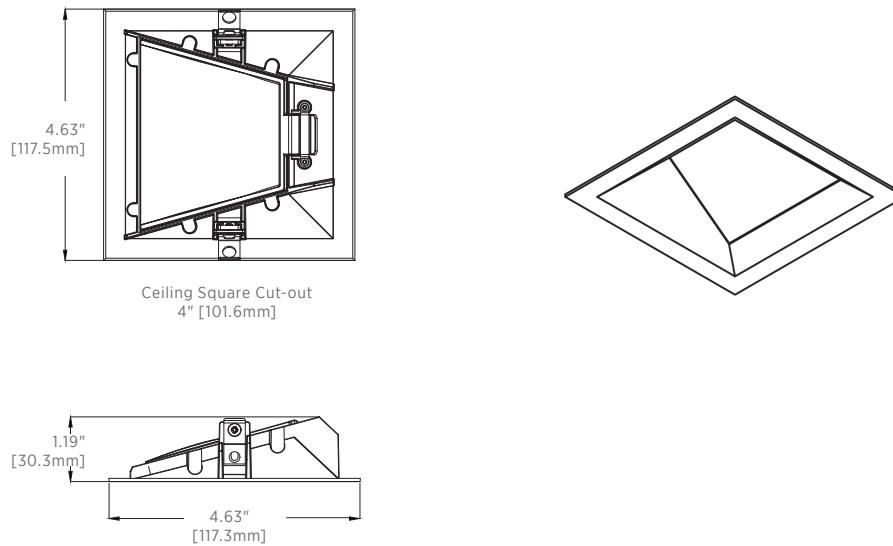
* For Title 24 and Title 20 compliant model numbers or for more information, please contact Customer Service at sales@ketra.com or 512.872.4349.

DIMENSION DRAWINGS

FLANGED HOUSING

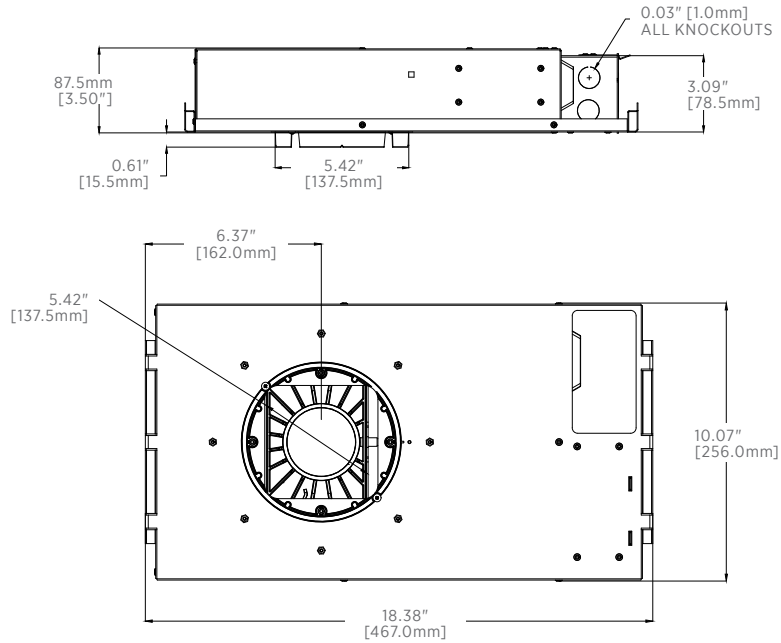


FLANGED TRIM

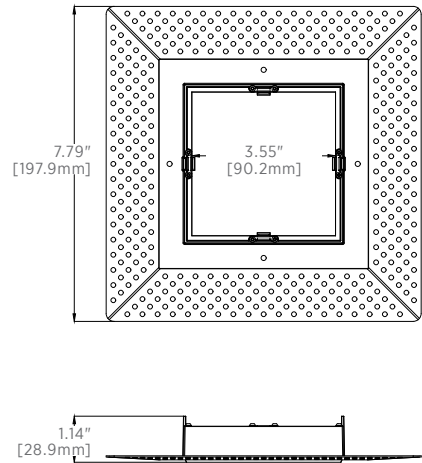


DIMENSION DRAWINGS

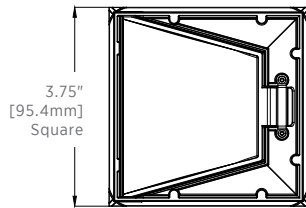
MUD-IN HOUSING



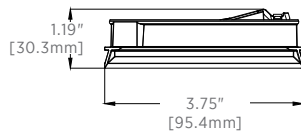
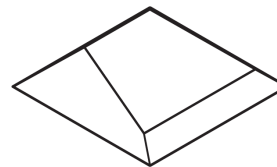
MUD-IN TRIM RETAINER



MUD-IN TRIM



Ceiling Hole Diameter
5.5" [139.7mm]

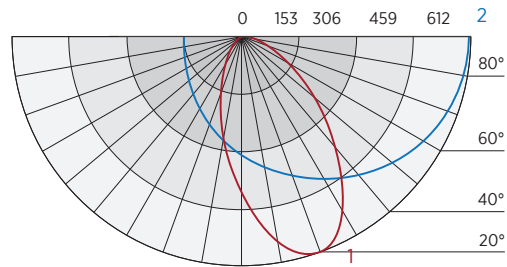


ISO FOOTCANDLE CHARTS: 2700 - 5000K VALUES ONLY, DELIVERED LUMENS

LM-79 compliant IES files available upon request.

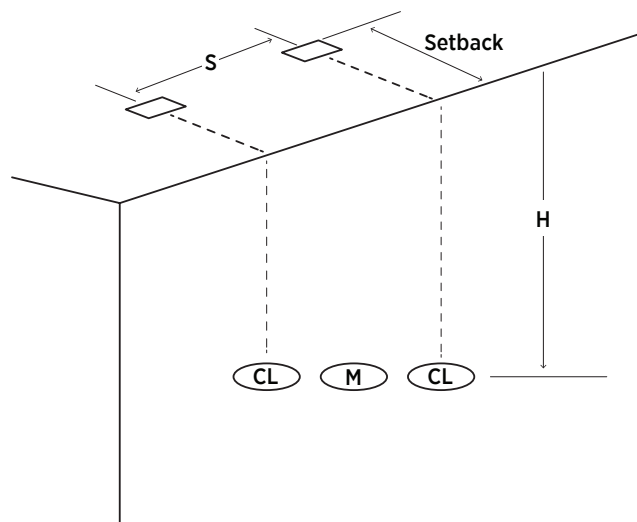
BEAM ANGLE: WALL WASH

Product Code	Wattage	Lumens
D3WWSQ18BTWW	18W	714



- 1 Vertical plane through horizontal angles (0-180) (through max. cd.)
- 2 Horizontal cone through vertical angle (20) (through max. cd.)

MULTIPLE UNITS DIAGRAM



2' from wall ("Setback")	2' on Center (S)			3' on Center (S)			4' on Center (S)		
	CL	M	CL	CL	M	CL	CL	M	CL
Distance from Ceiling (H)									
1'	30	29	30	21	20	21	17	14	17
2'	42	43	43	30	30	30	24	21	24
3'	43	45	45	32	31	31	25	23	25
4'	35	36	36	26	26	25	20	20	20
5'	25	26	27	20	19	19	15	15	15
6'	18	19	20	15	15	14	12	12	11
7'	14	14	15	11	11	11	9	9	9
8'	10	11	11	9	9	9	7	7	7
9'	8	9	9	7	7	7	6	6	6
10'	7	7	7	6	6	6	5	5	5

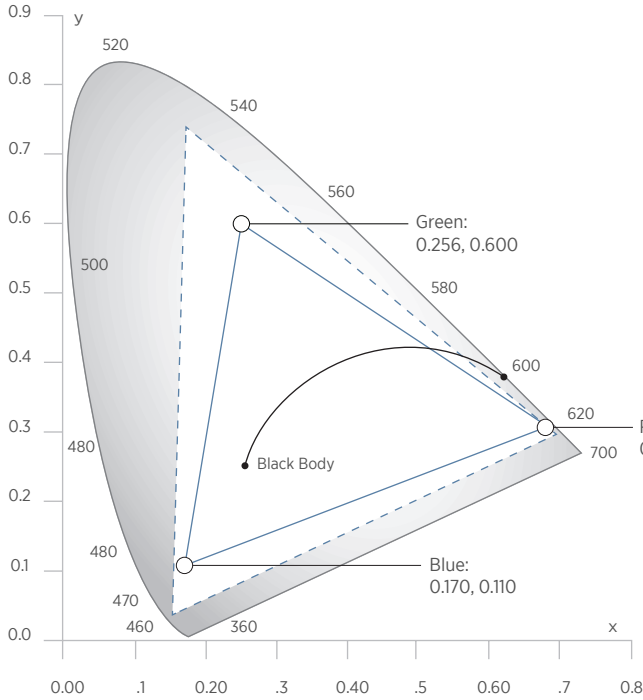
3' from wall ("Setback")	2' on Center (S)			3' on Center (S)			4' on Center (S)		
	CL	M	CL	CL	M	CL	CL	M	CL
Distance from Ceiling (H)									
1'	14	15	15	11	11	11	9	8	9
2'	24	25	25	18	18	18	14	13	14
3'	30	31	31	22	23	23	18	16	18
4'	29	30	31	22	23	23	18	16	18
5'	25	26	26	19	20	20	16	14	16
6'	20	21	21	16	16	17	13	12	13
7'	16	17	17	13	14	14	11	10	11
8'	13	14	14	11	11	11	9	8	9
9'	11	11	11	9	10	10	8	7	8
10'	9	9	9	8	8	8	7	6	7

Calculated with five luminaires. Reflectances: 80, 50, 20.
Values are squared to the nearest footcandle.

770-000028-06 r10
Specifications are subject to change without notice

WIDE GAMUT

CIE 1931 Color Chart



Ketra's tunable spectrum D3 downlight can easily be configured via Ketra's intuitive Design Studio software. The product can reproduce any color point within the triangle shaped gamut indicated in the chart below. With Ketra's innovative optical and thermal feedback system, the color point is maintained to an accuracy of <1 MacAdam ellipse over the lifetime of the product and across operating temperature range

- **Calibrated Gamut:** Color point is maintained to an accuracy of <1 MacAdam ellipse over the lifetime of the product and across operating temperature range.
- - - **Expanded Gamut:** Color calibration is relaxed such that each product produces the most saturated color it is capable of.

GENERAL SPECIFICATIONS

LED downlight shall employ closed loop optical and thermal feedback capable of maintaining color point accuracy of <1 MacAdam ellipse.

LED downlight shall have color spatial uniformity of <2 MacAdam ellipses over full field angle.

LED downlight shall have an integrated wireless control onboard.

LED downlight shall be capable of a CRI >90 along the Black Body Curve from 2700-5000K.

LED downlight lamp shall be a single source multi-die emitter consisting of both monochromatic and phosphor converted blue LED dye.

LED downlight shall be sealed, meeting UL damp location (and UL Wet Location with Wet Location Trim) requirements.

LED downlight shall be dimmable to 0.1% of measured luminous flux with wireless dimming.

LED downlight shall be UL listed and RoHS compliant.

LED downlight shall be capable of in situ firmware and software upgrades.

Ketra LED Fixtures are warranted to be free from material defects in material and workmanship for five (5) years or 25,000 hours from date of shipment, whichever is less.

LED D3 Fixture shall be # _____

TROUBLESHOOTING

The D3 uses built-in tests to check wiring and wireless connectivity. These tests run each time the D3 turns on, and may take several minutes.

Note: The D3 will NOT run these tests while provisioned to a Design Studio installation.

If the D3 finds a problem, it will let you know by emitting a corresponding color or, if no emitter is connected, by flashing the indicator lights on its power supply.

DIAGNOSTIC COLORS (REQUIRES EMITTER)

The D3 will emit a color to tell you the type of problem.

COLOR	CONDITION	CORRECTION
Red	Invalid input voltage on the power line	Ensure the input voltage matches the expected voltage for the D3's model.
Magenta	Poor wireless connectivity	Ensure that the D3 is not in a metal enclosure and that there are no significant obstructions between the D3 and other Ketra devices. Note: In some circumstances, magenta is expected. See the note below the table.
Yellow	Fair wireless connectivity	Ensure that the D3 is not in a metal enclosure and that there are no significant obstructions between the D3 and other Ketra devices.