

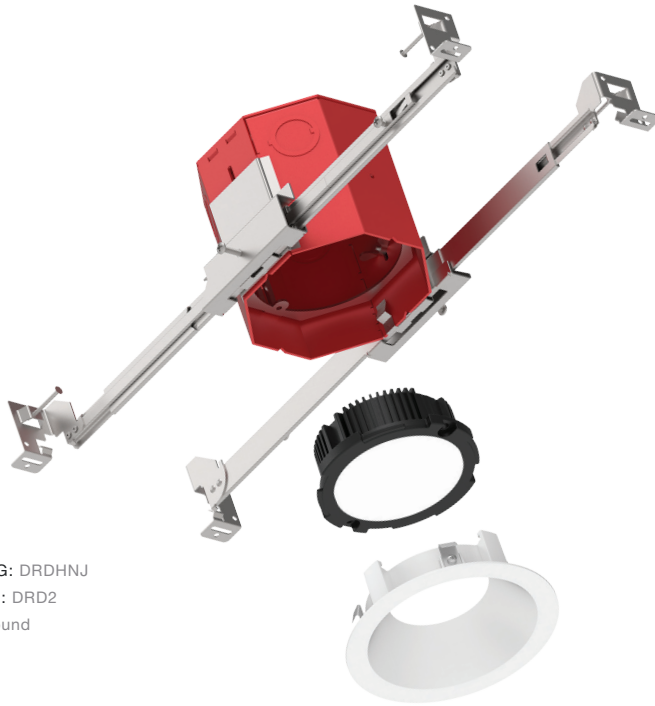
DRD2 & OneFrame

General Recessed LED Downlight

New Construction, Deep Junction Box

Project:	Type:
Product Code:	Date:

Spec Sheet V - 06.08.20



HOUSING: DRDHNJ
MODULE: DRD2
TRIM: Round

- Part of a modular downlighting system
- Combines the performance of a premium light engine with an intelligent design that makes it simple to install, maintain or replace
- Multiple ratings for compliancy in a wide range of situations
- Unique low profile and small aperture design allows installation in as little as 4" of ceiling space

PHYSICAL

Application

New Construction, Poured Concrete, Alternate Dimming and/or Emergency Lighting

Aperture

4" Octagonal Deep Junction Box

Ceiling Thickness

½" up to 1¾"

TRIMS

Available Trims

Round, Square, Hyperbolic, Pinhole, Beveled Pinhole, Wall Wash, Decorative, Flangeless, Emergency

Trim Finish

White, Black, Silver, Custom

OPTICAL

Delivered Lumens

750 lm (10.8W), 1000 lm (12.8W)

Color Quality

93+ CRI, 2-step SDCM

Color Temperature

● 2700K ● 3000K ○ 3500K ○ 4000K

Light Distribution

General Wall Wash

ELECTRICAL & CONTROLS

Input Voltage

120/277V

Dimming

TRIAC/ELV 5%, 0-10V, Lutron Hi-Lume®

RATINGS

Housing Ratings

Code compliant for use in fire-rated assemblies up to a maximum of 2-hours

STC/IIC Sound Rated

ASTM E283 Certified Air Tight

IC (Insulation Contact) Rated

Module Ratings

UL Listed for Wet Location

SPECIALTY OPTIONS

Warm Dim

● 3000K – 1800K, 800 lm (12.0W)

Turtle Friendly

> 560 nm, 400 lm (12.0W)



Guarantee: 50,000 hrs., 5 years



PRODUCT BUILDER

HOUSING

PRODUCT CODE		APPLICATION		APERTURE	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
DRDH	Housing	N	New Construction	JD	Deep Junction Box
				JC	Deep Junction Box, Concrete Tight

MODULE

PRODUCT CODE		LUMENS		CRI		CCT	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
DRD2M	Module	7	750 lm	9	93+ CRI	27	2700K
		10	1000 lm			30	3000K
						35	3500K
						40	4000K

Warm Dim Option

DRD2M	Module	08	800 lm	9	93+ CRI	3W	3000K - 1800K
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Turtle Friendly Option

DRD2M	Module	04	400 lm	-	N/A	TF	Turtle Friendly Lighting
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TRIM

PRODUCT CODE		SHAPE		APERTURE		STYLE		FINISH		OPTION	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
DRD2T	Trim	R	Round	JD	Deep Junction Box	S	Standard	WH	White	[Blank]	None
		S	Square ¹			H	Hyperbolic ^{2,3}	BK	Black	DOF	Decorative: Open, Frosted ^{2,3,4}
						P	Pinhole ^{2,3}	SW	Silver Reflector, White Flange	DCF	Decorative: Closed, Frosted ^{2,3,4}
						B	Beveled Pinhole ^{2,3}	CC	Custom Color	DCC	Decorative: Closed, Clear, Frosted Side ^{2,3,4}
						W	Wall Wash ²			DCCF	Decorative: Closed, Clear, Frosted inside ^{2,3,4}
										FL	Flangeless ^{2,3,5}
										DF	Dead Front ^{2,3,4}

DRDHX-MUD-FL	Flangeless Mud Plate <i>(Required with Flangeless Trim)</i>
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¹ Only available in Standard or Wall Wash style

² Only available in White or Custom Color finish

³ Only available in Round shape

⁴ Only available in Standard style

⁵ Requires DRDHX-MUD-FL Mud Plate

PRODUCT BUILDER - Alternate Dimming and/or Emergency Lighting

HOUSING

PRODUCT CODE		APPLICATION		APERTURE		DRIVER		OPTION	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
DRDH	Housing	N	New Construction	JD	Deep Junction Box	7O	0-10V, 750 lm	[Blank]	None
						8OW	0-10V, 800 lm	EM	EM Driver, Integrated Test Switch
						10O	0-10V, 1000 lm	EMS	EM Driver, Remote Test Switch
						7C	Lutron LDE1 ¹ , 750 lm		
						8CW	Lutron LDE1 ¹ , 800 lm		
						10C	Lutron LDE1 ¹ , 1000 lm		
						7L	Lutron LTEA2W ² , 750 lm		
						8LW	Lutron LTEA2W ² , 800 lm		
						10L	Lutron LTEA2W ² , 1000 lm		

MODULE

PRODUCT CODE		LUMENS		CRI		CCT		DRIVER	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
DRD2M	Module	7	750 lm	9	93+ CRI	27	2700K	A	Alternate
		10	1000 lm			30	3000K		
						35	3500K		
						40	4000K		

Warm Dim Option

DRD2M	Module	08	800 lm	9	93+ CRI	3W	3000K - 1800K	A	Alternate
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Turtle Friendly Option

DRD2M	Module	04	400 lm	-	N/A	TF	Turtle Friendly Lighting	A	Alternate
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TRIM

PRODUCT CODE		SHAPE		APERTURE		STYLE		FINISH		OPTION	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
DRD2T	Trim	R	Round	JD	Deep Junction Box	S	Standard	WH	White	[Blank]	None
		S	Square ³			H	Hyperbolic ⁴	BK	Black	DOF	Decorative: Open, Frosted ^{5,6}
						P	Pinhole ⁴	SW	Silver Reflector, White Flange	DCF	Decorative: Closed, Frosted ^{5,6}
						B	Beveled Pinhole ⁴	CC	Custom Color	DCC	Decorative: Closed, Clear, Frosted Side ^{5,6}
						W	Wall Wash ⁴			DCCF	Decorative: Closed, Clear, Frosted Inside ^{5,6}
										FL	Flangeless ^{4,5,7}
										DF	Dead Front ^{4,5,6}
										EM	Emergency ^{4,5,6}

DRDHX-MUD-FL Flangeless Mud Plate (Required for Flangeless Trim)

¹ Lutron LDE1 refers to Lutron Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black™

² Lutron LTEA2W refers to Lutron Hi-lume 1% 2-wire LED driver, 120V only

³ Only available in Standard or Wall Wash style

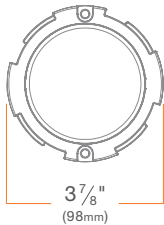
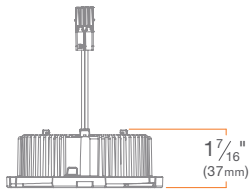
⁴ Only available in White or Custom Color finish

⁵ Only available in Round shape

⁶ Only available in Standard style

⁷ Requires DRDHX-MUD-FL Mud Plate

MODULE



DRD2

General LED Module

DRD2M

SUMMARY

LED: Cree® LED

DELIVERED LUMENS (w Trim): 750 lm (10.8W), 1000 lm (12.8W)

EFFICACY: 80 lm/W, 85 lm/W

COLOR QUALITY: 93+ CRI, 2-step SDCM

CCT: 2700K, 3000K, 3500K, 4000K

CONNECTOR: PowerPlug® Luminaire Disconnect Model 182

DIMMING: Down to less than 5% for TRIAC/ELV at 120V

INPUT VOLTAGE: 120/277V, 50/60Hz

MAX INPUT CURRENT (120V): 0.090 amps, 0.107 amps

MAX INPUT CURRENT (277V): 0.042 amps, 0.050 amps

POWER FACTOR: Greater than 0.9

TOTAL HARMONIC DISTORTION: Less than 20%

AMBIENT OPERATING TEMPERATURE: -20°C to 40°C

PHOTOMETRIC TESTING: Tested in accordance to IESNA LM-79-2008

LISTINGS: ENERGY STAR® qualified, California Title 24 2016 JA8 compliant, UL Listed for Wet Location (flanged trims only), cULus Listed

LIFETIME: 50,000 hours at 70% lumen maintenance

WARRANTY: 5 year limited warranty

WARM DIM OPTION

LED: Bridgelux LED, **DELIVERED LUMENS (w Trim):** 800 lm (12.0W),

EFFICACY: 70 lm/W, **CCT RANGE:** 3000K - 1800K, **MAX INPUT**

CURRENT (120V): 0.11 amps, **MAX INPUT CURRENT (277V):** 0.047 amps

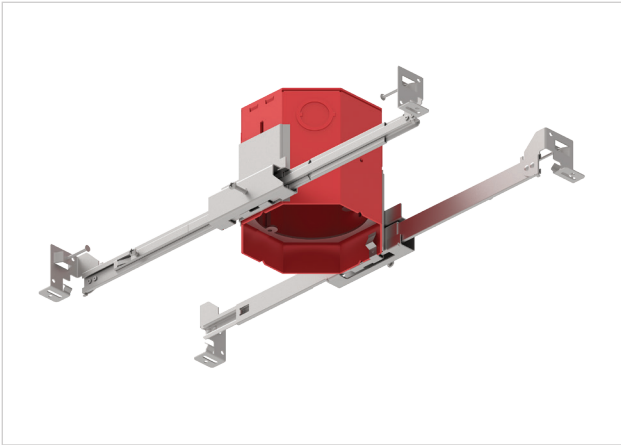
TURTLE FRIENDLY OPTION

LED: Cree® Red-Orange LED (no color filter), **DELIVERED LUMENS**

(w Trim): 400 lm (12.0W), **WAVELENGTH:** > 560 nm, **MAX INPUT**

CURRENT (120V): 0.11 amps, **MAX INPUT CURRENT (277V):** 0.047 amps

HOUSING



OneFrame

New Construction Deep Junction Box

DRDHNJD

SUMMARY

JUNCTION BOX: Equipped with (8) trade size knockouts (four concentric side ($\frac{3}{4}'' + \frac{1}{2}''$), two concentric top ($\frac{3}{4}'' + \frac{1}{2}''$), two $\frac{1}{2}''$ top) and (4) Romex knockouts (top) to allow straight conduit runs. Approved for 8 (four in, four out) #12 AWG 70°C.

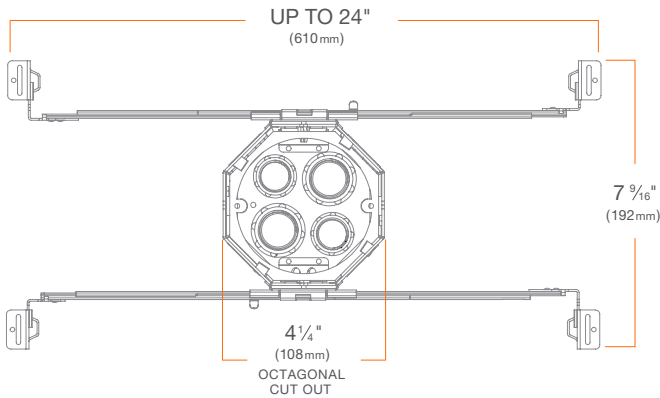
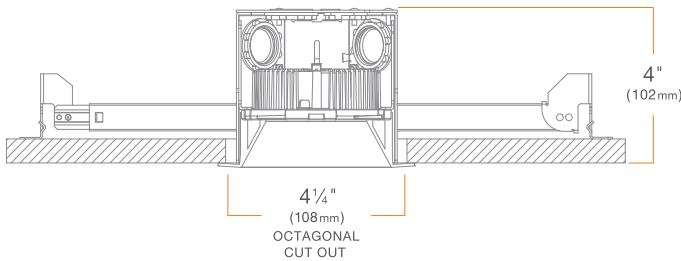
MOUNTING: Pre-installed mounting brackets allow vertical adjustment of bar hangers up to 1".

CEILING: $\frac{1}{2}''$ up to $1 \frac{3}{4}''$

CUTOUT: $4 \frac{1}{4}''$ (108mm) octagonal opening

LISTINGS: Metallic outlet box certified UL514A, code compliant for use in appropriate fire-rated assemblies for up to 2-hours, STC/IIC Sound Rated, ASTM E283 certified Air Tight, IC (Insulation Contact) rated

WARRANTY: 5 year limited warranty



HOUSING - Concrete Tight



OneFrame

Concrete Tight Deep Junction Box

DRDHJNC

- Designed for high rise structures that require steel and concrete for reinforcement
- Features spot-welded areas and adaptations for poured concrete applications

SUMMARY

JUNCTION BOX: Equipped with (4) trade size concentric knockouts ($\frac{3}{4}'' + \frac{1}{2}''$) to allow straight conduit runs. Approved for 8 (four in, four out) #12 AWG 90°C.

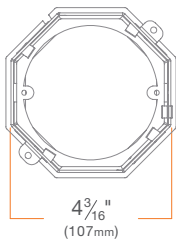
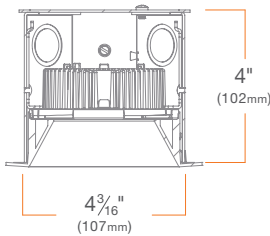
MOUNTING: (2) external tabs for wood, steel or concrete form mounting

COVER: Removable top cover for easy access to electrical wiring work prior to concrete pour

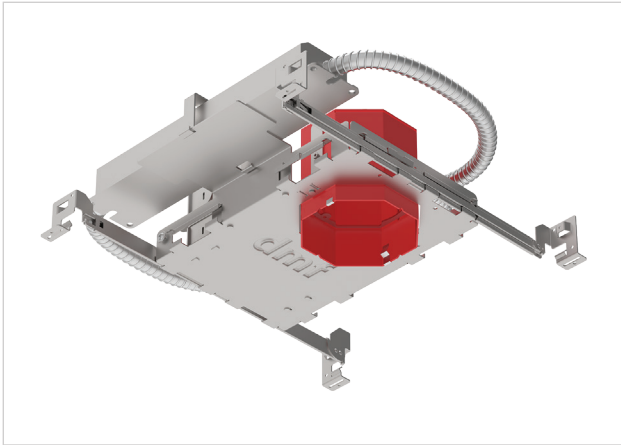
APPLICATION: Poured deck (floor) high-rise new construction

LISTINGS: Metallic outlet box certified UL514A, concrete tight, code compliant for use in appropriate fire-rated assemblies for up to 2-hours, STC/IIC Sound Rated, ASTM E283 certified Air Tight

WARRANTY: 5 year limited warranty



HOUSING - Alternate Dimming and/or Emergency Lighting



OneFrame

Alternate Dimming and/or Emergency Lighting
Deep Junction Box

DRDHNJD

- Offers enhanced dimming protocol compatibility including 0-10V and Lutron Hi-Lume® 1%
- Can provide lighting for more than 90 minutes after power failure - enough to meet common safety regulations like NFPA 101

SUMMARY

JUNCTION BOX: Equipped with (2) trade size concentric top knockouts ($\frac{3}{4}$ " + $\frac{1}{2}$ "") to allow straight conduit runs. Approved for 2 (one in, one out) #12 AWG 70°C.

MOUNTING: Pre-installed mounting brackets allow vertical adjustment of bar hangers up to 1".

CEILING: $\frac{1}{2}$ " up to $1\frac{3}{4}$ "

CUTOUT: $4\frac{1}{4}$ " (108mm) octagonal opening

LISTINGS: Metallic outlet box certified UL514A, code compliant for use in appropriate fire-rated assemblies for up to 2-hours, STC/IIC Sound Rated, ASTM E283 certified Air Tight, IC (Insulation Contact) rated

INPUT VOLTAGE: 120/277V, 50/60Hz

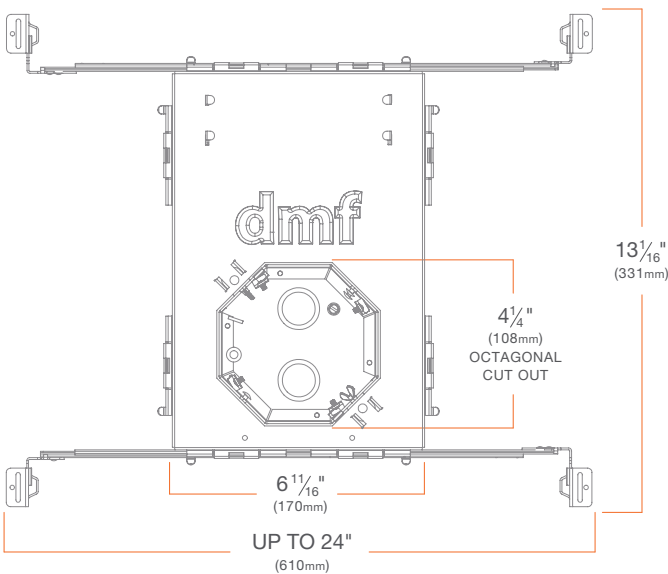
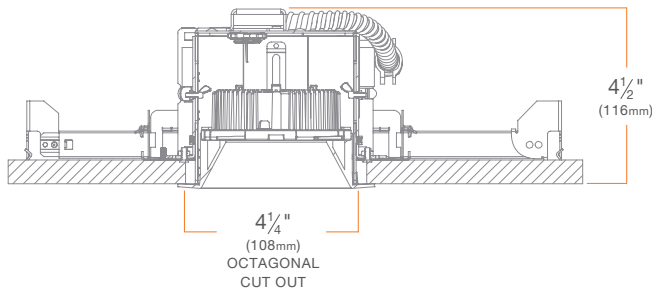
MAX INPUT CURRENT (120V): 0.090 amps (750 lm), 0.107 amps (1000 lm), 0.11 amps (800 lm Warm Dim)

MAX INPUT CURRENT (277V): 0.042 amps (750 lm), 0.050 amps (1000 lm), 0.047 amps (800 lm Warm Dim)

POWER FACTOR: Greater than 0.9

TOTAL HARMONIC DISTORTION: Less than 20%

WARRANTY: 5 year limited warranty



TRIM



OneFrame Trims

Recessed LED Downlight Trims

DRD2T

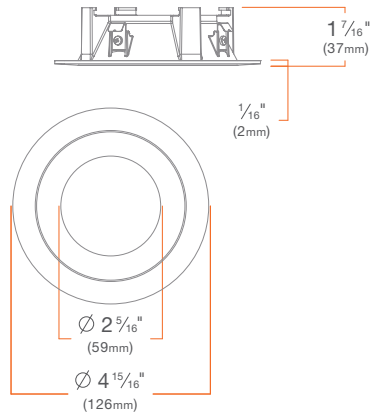
SUMMARY

CONSTRUCTION: Die-cast aluminum

INSTALLATION: Twist & Lock (flanged trims only)

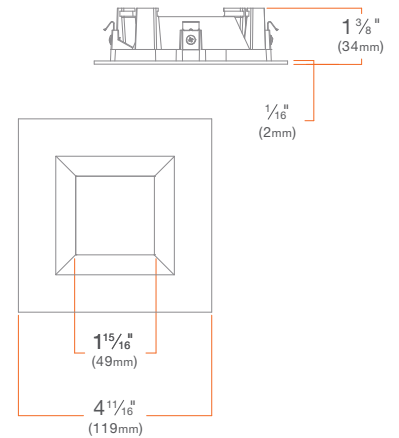
Round Trim

DRD2TRJDSWH



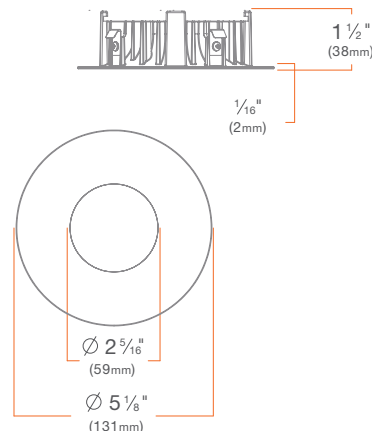
Square Trim

DRD2TSJDSWH



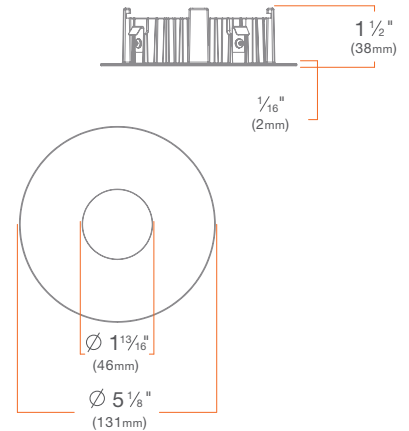
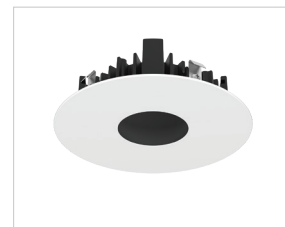
Hyperbolic Trim

DRD2TRJDHWH



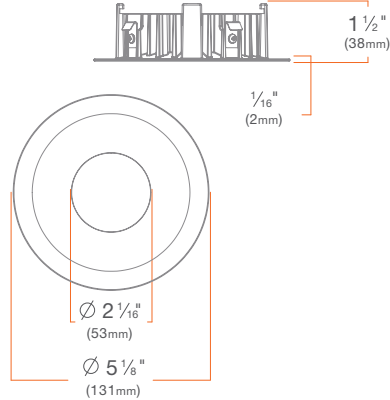
Pinhole Trim

DRD2TRJDPWH



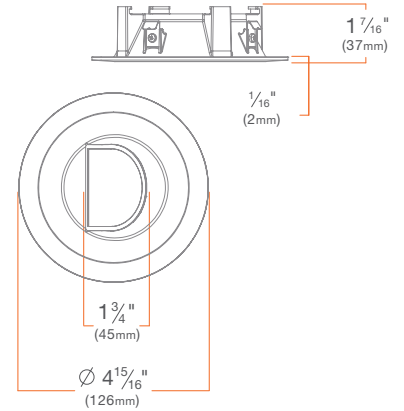
Beveled Pinhole Trim

DRD2TRJDBWH



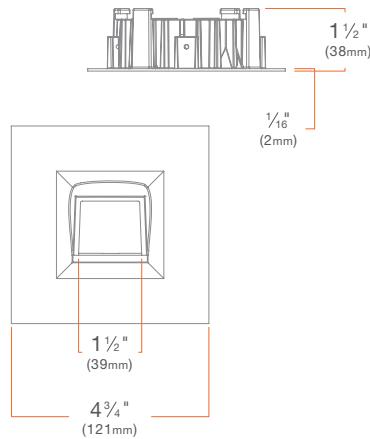
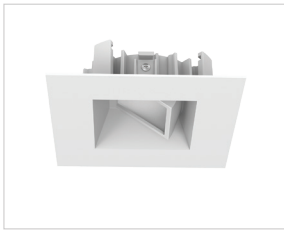
Round Wall Wash Trim

Round: DRD2TRJDWWH



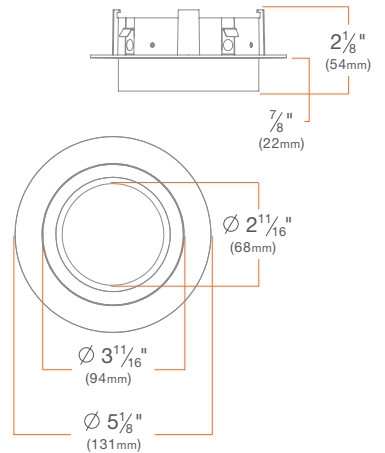
Square Wall Wash Trim

Square: DRD2TSJDWWH



Decorative Open Trim

Frosted: DRD2TRJDSWHDOF

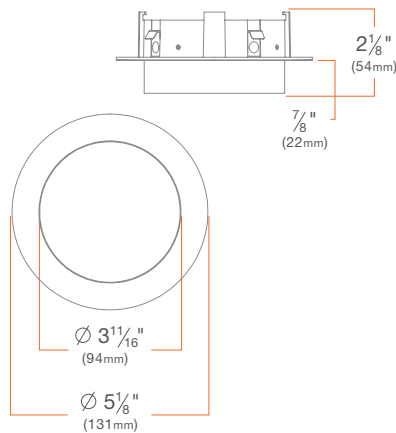


Decorative Closed Trim

Frosted: DRD2TRJDSWHDCF

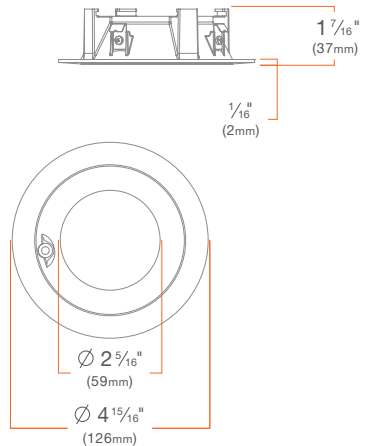
Clear, Frosted Inside: DRD2TRJDSWHDCC

Clear, Frosted Sides: DRD2TRJDSWHDCCF



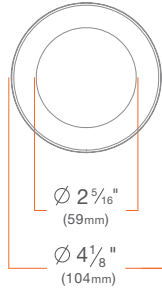
Emergency Trim

DRD2TRJDSWHEM



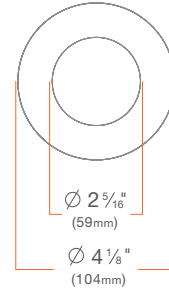
Round Flangeless Trim Insert

DRD2TRJDSWHFL



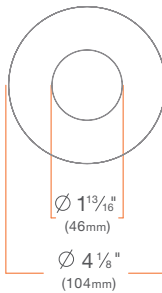
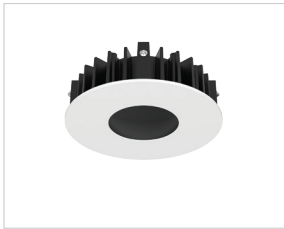
Hyperbolic Flangeless Trim Insert

DRD2TRJDHWHFL



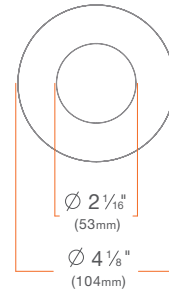
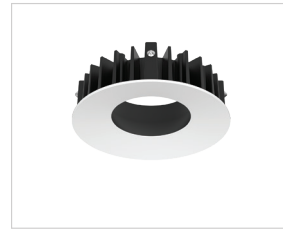
Pinhole Flangeless Trim Insert

DRD2TRJDPWHFL



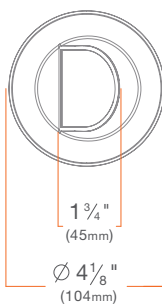
Beveled Pinhole Flangeless Trim Insert

DRD2TRJDBWHFL



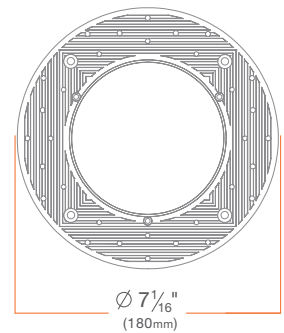
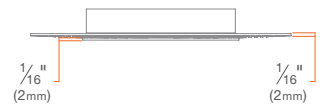
Round Wall Wash Flangeless Trim Insert

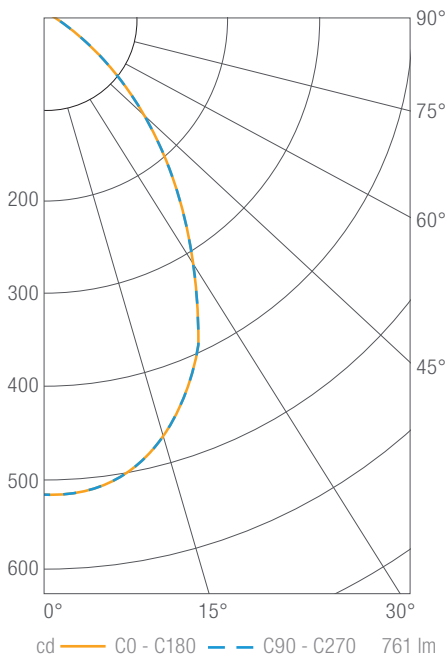
DRD2TRJDWWHFL



Flangeless Mud Plate

DRDHX-MUD-FL



PHOTOMETRY
DRD2 750 lm, 3000K DRD2M7930 / Round Trim White DRD2TRJDSWH


Luminous Intensity

Gamma	C 0°
0°	518
5°	516
10°	506
15°	484
20°	447
25°	398
30°	335
35°	263
40°	196
45°	147
50°	110
55°	79
60°	54
65°	36
70°	23
75°	14
80°	9
85°	5
90°	2

Values in candela

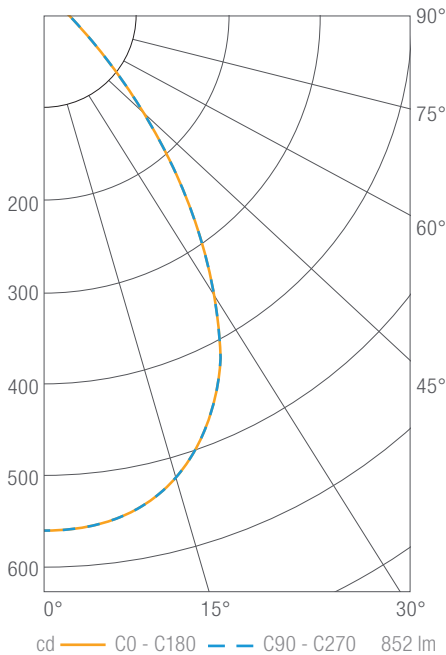
Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	361	48
0-40	526	69
0-60	706	93
0-90	761	100
0-180	761	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	58	4.2'
6'	14	8.5'
9'	6	12.7'
12'	4	16.6'

Beam Angle: 70°

DRD2 - Warm Dim 800 lm, 3000K DRD2M0893W / Round Trim White DRD2TRJDSWH


Luminous Intensity

Gamma	C 0°
0°	559
5°	556
10°	546
15°	527
20°	494
25°	445
30°	379
35°	297
40°	216
45°	158
50°	120
55°	89
60°	59
65°	37
70°	24
75°	16
80°	10
85°	4
90°	0

Values in candela

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	404	47
0-40	588	69
0-60	792	93
0-90	852	100
0-180	852	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	62	4.4'
6'	16	8.7'
9'	7	13.1'
12'	4	17.4'

Beam Angle: 72°

Lumen Scaling

DRD2M7 (750 lm)	DRD2M10 (1000 lm)
1.00	1.33

CCT Scaling

DRD2M7927 (2700K)	DRD2M7930 (3000K)	DRD2M7935 (3500K)	DRD2M7940 (4000K)
0.93	1.00	1.00	1.07

DIMMER COMPATIBILITY

Recommended Phase-control Dimmers (Dims down to 5% nominal measured light output)

Brand	Series	Model Number	Max Load DRD2M7	Max Load DRD2M10
Control 4	Control 4	C4-APD120	10	9
Cooper	Decorator	DLC03P, DAL06P	25	20
Legrand	Adorne	ADTP703TU	35	30
Lutron	Caseta	PD-6WCL	12	10
	CL Series	AYCL-153, CTCL-153, DVCL-153, LGCL-513, SCL-153, TGCL-513	12	10
	CL Series	AYCL-253, DVCL-253	20	15
	Grafik Eye 3000	QSGR-3P	30	25
	Grafik Sys / Homeworks	RPM-4A	25	20
	Grafik Sys / Homeworks	RPM-4U	30	25
	Maestro CL	MACL-153M, MSCL-OP153M, MSCL-VP153M	12	10
	Maestro Wireless	MRF2-6ELV, MRF2-6CL	12	10
	Radio RA	RRD-6NA, RRD-6CL, RRD-6D	12	10

Compatible Phase-control Dimmers¹ (Dims down to 20% nominal measured light output)

Brand	Series	Model Number	Max Load DRD2M7	Max Load DRD2M10
Cooper	Slide	SLC03P, SAL06P	25	20
Legrand	Harmony	H703PTU, HCL453P	30	25
Leviton	IllumaTech Slide	IPE04	25	20
	SureSlide	6621, 6674	10	10
Lutron	Diva	DV-600	12	10
	Maestro	MA-600	12	9
	Maestro ELV	MAELV-600, MSCELV-600	35	30
	Maestro Wireless	MRF2-6ND	12	10
	Power Booster	PHPM-PA, PHPM-WBX	25	20
Philips	Sunrise	SR400RPC120, ZP260QEW	20	15
Watt Stopper	Digital Light Management	LMRC-221	160	150
	Dimming Sensor	PW-100D	14	12

¹ Dimmer compatibility reflects performance compatibility only. Please reference your local codes for application.

DIMMER COMPATIBILITY

Recommended Phase-control Dimmers - Warm Dim (Dims down to 5% nominal measured light output)

Brand	Series	Model Number	Max Load
Cooper	Decorator	DAL06P, DLC03P	20
	Slide	SLC03P	20
Leviton	Sure Slide	6621, 6631	10
Lutron	Diva CL	DVCL-153P	10
	Diva CL	DVCL-253P	15
	Grafik	GTJ-150-WH	10
	Maestro	MRF2-6ND	10
	Maestro CL	MACL-153	10
	Maestro CL	MA-PRO-WH	15
	Maestro CL	MACL-153M, MSCL-OP153M, MSCL-VP153M	10
	Radio RA	RRD-6NA, RRD-6ND	10
	Skylark	SELV-300P	20

Recommended 0-10V Dimmers (Dims down to 1% nominal measured light output)

Brand	Series	Model Number	Max Load DRD2M7	Max Load DRD2M10
Legrand	Titan	CD4FB	80	65
Leviton	IllumaTech	IP710-DLZ	40	30
Lithonia	Synergy	ISD BC	35	30
Lutron	Diva	DVTV	60	50
	Nova	NFTV	60	50
	Nova	NTSTV-DV	60	50
	PowPak	RMJ-5T-DV	60	50