

downlight – reflector
id®



Covered by US Patent: 7,748,868

features

Downlight offers a parabolic 50 degree cutoff reflector in a simple straight down aiming position.

Perfect Fit™ installation process provides seamless integration in plaster, drywall and acoustical tiles, while maintaining optics in any ceiling thickness.

Trim provides for easy relamping.

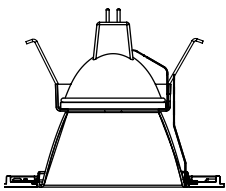
Smart Lock™ ring allows quick removal and re-assembly of trim components for field painting.

Standard white finish is field paintable.

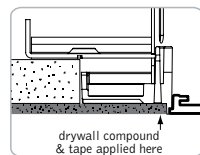
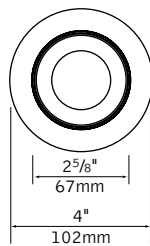
Interchangeable lamp and trim mechanisms allow for maximum flexibility, even after luminaire is installed.

trim assembly

trim

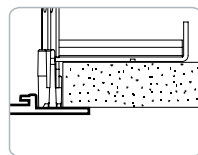
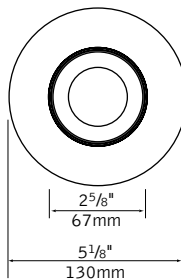


flush trim
(drywall only)



ceiling cutout dimensions:
6 3/16"

overlap trim

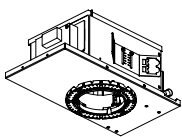


ceiling cutout dimensions:
T & IC Housings - 4 11/16"
RT Housing - 4 5/8"

housing types

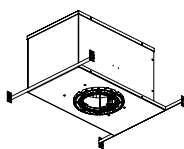
T

14" x 7.625" x 5" h



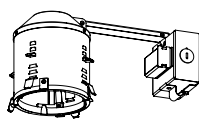
IC (air-tight)

16.5" x 10" x 9" h



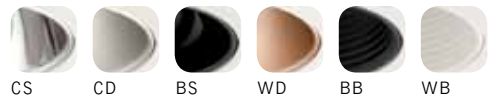
RT

11.64" x 6.59" x 5.58" h

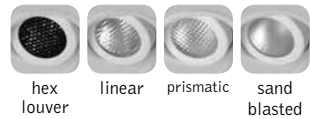


overlap faceplate only

reflector options

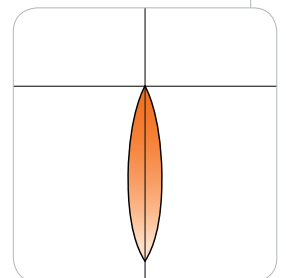


lens accessories



performance

Downlight Clear Specular Reflector
Q71MR16/C/NFL25
4824 cd @ 0° (0° tilt)



Visit focalpointlights.com for complete photometric data.

fixture:

project:

housing specifications

lamp

Halogen MR16 lamp provides numerous beam options from 10° to 40°.

construction

(T)Thermally protected housing for new construction applications without direct contact with insulation. Insulation to be kept 3" away from housing. Unit is enclosed in 20ga. black painted CRS housing, which eliminates stray light into the plenum, on a 20ga. CRS frame. Housing ships standard with butterfly brackets which mount to ½ emt or channel and vertically adjust 2". Bar hangers are an option and must be specified when ordering T-rated housing. Transformer is accessible from below ceiling. Unit may be relamped from above. Fixture will not exceed 7.5lbs.

(IC) Insulated ceiling housing for new construction applications with direct insulation contact. Unit is constructed of double wall 18ga. aluminum housing on a 20ga. CRS frame. Housing ships standard with locking bar hangers. Transformers and thermal protectors are accessible from below ceiling. Housing is gasketed and complies with ASTM E-283, air-tight energy codes. Fixture will not exceed 11lbs.

(RT)Remodel, thermally protected housing for remodel construction applications without direct contact with insulation. Insulation to be kept 3" away from housing. Unit is 20ga. black painted CRS with contoured top and hinging J-box arm. Housing locks into finished ceiling via 4 removable spring clips. J-box and transformers are accessible by removing housing from ceiling. Fixture will not exceed 4.5lbs.

electrical

Porcelain bi-pin socket with quick connection.

Acoustically isolated transformer, replaceable from below, mounted outside of housing to ensure cool operation and minimize hum. Transformers available in either electronic or magnetic 120V or 277V. For residential dimming applications, toroidal magnetic transformer is available. Large junction box with pryouts. UL listed for thru branch wiring, four #12 90°C conductors for T housing and two #14 90°C conductors for RT and IC housing.

installation

Adjustable throat allows infinite adjustment for ½" to 1½" thick ceilings. Shipped in ½" ceiling position. For thicker ceilings consult factory.

Ceiling thickness adjustment sleeve locks with supplied ¼" hex driver.

Sleeve allows fine tuning of the housing for a perfect fit. Comes with laser/string alignment guides.

Housing ships with dust cover.

trim specifications

aesthetics

Parabolic reflector cone ensures glare free optics. Reflector is .040 spun aluminum. Optional slope-sided baffle, consists of ¼" steps. Black and white baffles are painted finishes. Optics sit flush with the front surface of the faceplate.

Matte white finish may be used as a primer coat for field painting. Smart Lock™ ring allows disassembly for custom field painting.

optics

50° cutoff to the lamp and lamp image.

construction

Torsion springs pull trim tight to the ceiling.

Auto Memory for relamping, keeps lamp in a straight down aiming position.

Trim stays captive to housing during relamping via torsion springs.

Tempered soft focus lens supplied as standard.

Lamp tray can hold up to two accessories, up to ¾" thick.

No visible fasteners within the trim.

Mechanical light traps eliminate light leaks.

Warp free die-cast aluminum faceplate, .040" thick flange on overlap versions.

Installation clip allows Downlight to be used in basic housing. Removable clips slide and lock into place to dedicate fixture to downlight use only.

labels

UL listed, Damp label standard.

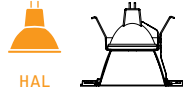
No visible labels when trim is installed.

housing ordering

housing series	FD4
Halogen Housing	FD4
lamp	MR
MR16 Lamp	MR
transformer type	
Electronic Dimming 120V, 11.7V	E1
Electronic Dimming 277V, 11.7V	E2
Magnetic Dimming 120V, 11.7V (T housings only)	M1
Magnetic Dimming 277V, 11.7V (T housings only)	M2
Toroidal Dimming 120V (IC & RT housings only)	M1T
faceplate type	
Round Flush (T & IC housings only)	RF
Round Overlap	RO
housing type	
(T Rated: 71W max. IC Rated & Remodel: 50W max.)	
New Construction T Rated, up to 1½" ceilings	T
New Construction T Rated, 1½" to 2½" ceilings	T2
New Construction T Rated, 2½" to 3½" ceilings	T3
New Construction IC Rated, up to 1½" ceilings	IC
New Construction IC Rated, 1½" to 2½" ceilings	IC2
New Construction IC Rated, 2½" to 3½" ceilings	IC3
Remodel T Rated (overlap faceplate only)	RT
factory options	
Bar Hangers (T housings only)	BH
Wattage Restriction Label (XX=wattage)	WRXX
Chicago Plenum (T housings only)	CP
trim ordering	
trim aperture	D2
2½" Aperture	D2
faceplate type	
Round Flush (T & IC housing only) (drywall only)	RF
Round Overlap	RO
optic	DNF
Downlight	DNF
color	
Clear Specular	CS
Clear Diffuse	CD
Black Specular	BS
Warm Diffuse	WD
Black Baffle	BB
White Baffle	WB
faceplate finish	
White	WH
Black	BK
Titanium Silver	TS
Aluminum Raw	AL
lens accessories (soft focus lens supplied as standard)	
Hex Louver	HL
Linear Spread Lens	LSL
Prismatic Spread Lens	PSL
Sand Blasted Lens	SBL
Clear Lens	CL
UV Lens	UVL

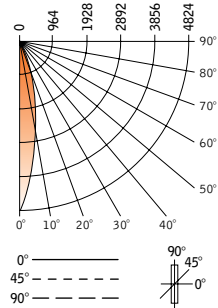
a complete unit consists of two line items, housing and trim
example: FD4-MR-E1-RF-T / D2-RF-DNF-CD-WH

rnd downlight – reflector
id®



Luminaire: 71W MR16 downlight, narrow flood distribution with soft focus lens
 Filename: D2RXDNCSHA71NF25_0.ies
 Catalog #: D2-RX-DNF-CS-WH
 Efficiency: 80%
 Photometric Report #: 13551.0

CANDLEPOWER DISTRIBUTION



Spacing: .3
 Criterion: .4

Vertical Angle	Horizontal Angle					Zonal Lumens
	0°	22.5°	45°	67.5°	90°	
0°	4824	4824	4824	4824	4824	
5°	3877	3929	3880	3910	3821	372
15°	1319	1266	1328	1422	1513	385
25°	299	289	292	323	334	141
35°	30	26	24	24	27	16
45°	5	4	5	5	5	4
55°	0	0	0	0	0	0
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt
0°-30°	898	78.7	97.8
0°-40°	914	80.2	99.6
0°-60°	917	80.5	100.0
0°-90°	917	80.5	100.0
Total Luminaire	917	80.5	100.0

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45°	2010	2010	2010
55°	0	0	0
65°	0	0	0
75°	0	0	0
85°	0	0	0

CO-EFFICIENTS OF UTILIZATION

	Floor				Ceiling				Wall			
	80	70	50	20	80	70	50	20	30	10	10	00
RCR 0	96	96	96	96	94	94	94	89	89	86	86	82
1	93	92	90	89	91	90	88	87	85	84	83	81
2	90	87	85	83	88	86	82	84	80	81	79	79
3	88	84	81	79	86	83	79	81	78	79	76	78
4	85	81	78	76	84	80	75	79	75	77	74	76
5	83	78	75	73	82	78	73	76	72	75	71	74
6	81	76	73	71	80	76	71	75	70	74	70	73
7	79	74	71	69	78	74	69	73	68	72	68	71
8	77	72	69	67	76	71	67	71	66	70	66	69
9	75	70	67	65	74	69	65	69	64	68	64	68
10	72	67	64	62	72	67	62	67	62	66	62	66

Numbers indicate percentage values of reflectivity.

Go to www.focalpointlights.com for additional photometric data.