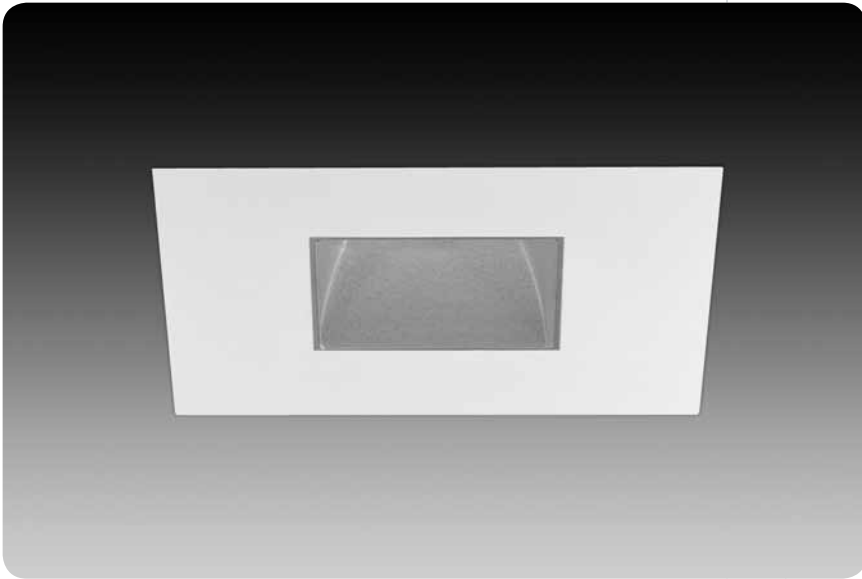


downlight – reflector
id®



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.

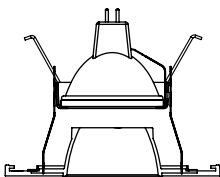
Smart Lock™ ring allows quick removal and re-assembly of trim components for field painting.

Standard white finish is field paintable.

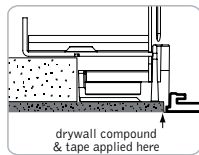
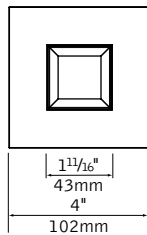
Interchangeable lamp and trim mechanisms allow for maximum flexibility, even after luminaire is installed.

trim assembly

trim

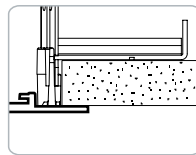
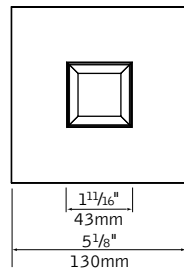


flush trim
(drywall only)



ceiling cutout dimensions:
6 3/16"

overlap trim

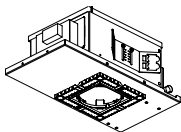


ceiling cutout dimensions:
T & IC Housings - 4 11/16"
RT Housing - 4 5/8"

housing types

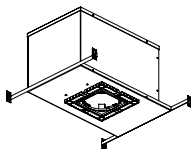
T

14" x 7.625" x 5" h



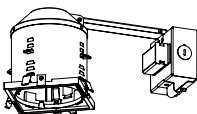
IC (air-tight)

16.5" x 10" x 9" h



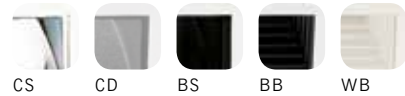
RT

12.08" x 6.32" x 5.58" h



overlap faceplate only

reflector options

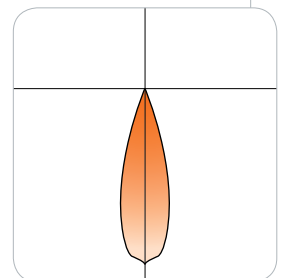


lens accessories



performance

Downlight Clear Specular Reflector
Q71MR16/C/NSP15
3342 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 die-cast aluminum for sharp corners. Optional die-cast 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.

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 ¼" 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

Halogen Housing FD4

lamp

MR16 Lamp MR

transformer type

Electronic Dimming 120V, 11.7V E1

Electronic Dimming 277V, 11.7V E2

Magnetic Dimming 120V, 11.7V M1
(T housings only)

Magnetic Dimming 277V, 11.7V M2
(T housings only)

Toroidal Dimming 120V M1T
(IC & RT housings only)

faceplate type

Square Flush SF
(T & IC housings only)

Square Overlap SO

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 RT
(overlap faceplate only)

factory options

Bar Hangers BH

Wattage Restriction Label WRXX
(XX=wattage)

Chicago Plenum CP
(T housings only)

trim ordering

trim aperture

1½" Aperture D2

faceplate type

Square Flush SF
(T & IC housing only) (drywall only)

Square Overlap SO

optic

Downlight DNF

color

Clear Specular CS

Clear Diffuse CD

Black Specular BS

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

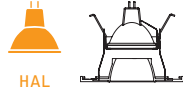
Clear Lens CL

UV Lens UVL

a complete unit consists of two line items, housing and trim

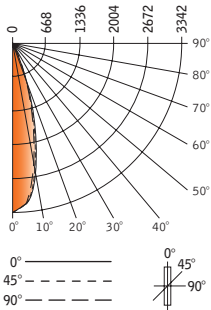
example: FD4-MR-E1-SF-T / D2-SF-DNF-CD-WH

sqr downlight – reflector
id®



Luminaire: 71W MR16 downlight, narrow flood distribution with soft focus lens
 Filename: D2SXDNCSHA71NF25_0.ies
 Catalog #: D2-SX-DNF-CS-WH
 Efficiency: 72%
 Photometric Report #: 13639.0

CANDLEPOWER DISTRIBUTION



Spacing: .4
 Criterion: .5

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	
0°	4163	4163	4163	4163	4163
5°	3838	3893	3954	4055	4047
15°	1175	1252	1405	1577	1561
25°	54	60	128	84	73
35°	9	9	12	8	7
45°	0	0	0	0	0
55°	0	0	0	0	0
65°	0	0	0	0	0
75°	0	0	0	0	0
85°	0	0	0	0	0
90°	0	0	0	0	0

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt
0°-30°	814	71.4	99.3
0°-40°	820	71.9	100
0°-60°	820	71.9	100
0°-90°	820	71.9	100
Total Luminaire	820	71.9	100

LUMINANCE DATA (CD/M²)

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

CO-EFFICIENTS OF UTILIZATION

Floor	80				70				50				30				10				00			
Ceiling	70	50	30	10	84	84	84	84	80	80	80	80	76	76	76	76	73	73	73	73	72	72	72	72
Wall	86	86	86	86	84	84	84	84	80	80	80	80	76	76	76	76	73	73	73	73	72	72	72	72
RCR	0	1	2	3	4	5	6	7	8	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10
1	83	82	81	80	82	81	79	78	78	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62
2	81	78	77	75	79	77	74	75	73	73	73	71	71	70	69	68	67	66	65	64	63	62	61	60
3	79	76	74	72	78	75	71	73	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55
4	77	73	71	69	76	73	69	71	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53
5	75	71	69	67	74	71	66	69	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51
6	73	70	67	65	73	69	65	68	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50
7	72	68	65	64	71	68	64	67	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49
8	70	66	64	62	70	66	62	65	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47
9	69	65	62	61	68	65	61	64	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46
10	67	63	61	59	67	63	59	62	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44

Numbers indicate percentage values of reflectivity.

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