NM4-R470

4" M4 Round LED Recessed Elbow

Source: 12W LED 950lm

Type Project Catalog No. Notes

PRODUCT DESCRIPTION

4" M4 Round LED Elbow downlight features an adjustable head that extends 75° and rotates 300° for precise aiming. Quality and convenience with easy installation for insulated or non-insulated applications. Luminaires can be configured into square trim with accessory.

FEATURES

- · No housing required IC Air-Tight rated
- · Field changeable optics included
- Easy installation for remodel or new construction applications
- · Square trim available for an alternative appearance
- · Quick disconnect allows for extended lengths
- · 2700K or 3000K @ 90+ CRI
- · Triac or ELV dimming
- 5-year limited warranty
- · ENERGY STAR certified
- · cETLus Listed for Damp Locations

SPECIFICATION

Construction: Die-cast aluminum trims available in matte black or matte powder white finish. Rotates 300° horizontally and extends up to 75°. Optional field changeable square trim is available.

Optics: Each downlight includes field changeable optics (24° spot and 40° narrow flood - preinstalled).

Air Flow Restriction: Luminaire has factory installed gasket to restrict airflow from room into ceiling plenum to <2CFM (cubic feet per minute) in accordance with ASTM-283 Air-Tight requirements.

Clearance: IC rated luminaires are rated for direct contact with insulation (not spray foam insulation), no minimum clearance is required.

Junction Box: Prewired junction box includes quick connect to LED fixtures for ease of installation. Junction box includes four $\frac{1}{2}$ " trade size knockouts and snap on cover with 7" quick connect wire. Luminaire includes 6" quick connect wire.

Mounting: No housing is required, two tensions steel spring clips secure luminaire to ceiling. Accommodates ceiling thickness up to $3\sqrt[4]{}$. New construction frame-in available, see mounting accessories.

ELECTRICAL

Input Voltage: 120V

Lumens / Wattage: 950lm / 12W Color Temperature: 2700K or 3000K Color Rendering Index: 90+CRI

Beam Spread: 24° Spot and 40° Narrow Flood (included) **Operating Temp.:** 0°C to 25°C ambient temperature

Lifetime: 50,000 hours @ L70

Dimming: Dimmable down to 10% with Triac or ELV <u>Click Here</u> or check complete dimmer list at www.NoraLighting.com in the "Compatibility" page under "Resources" tab

OPTIONAL TRIM ACCESSORIES

NM4-SET: Square Trim for NM4-R470, Black or White

OPTIONAL MOUNTING ACCESSORIES

NF-R246: Universal New Construction Frame-In NFC-R430: New Construction Frame-In with Collar NM2-EW-4: 4' Quick Connect Linkable Extension Cable NM2-EW-10: 10' Quick Connect Linkable Extension Cable

LABELS AND LISTINGS

- · cETLus Listed for Damp Locations
- · ENERGY STAR certified
- · 5-Year Limited Warranty
- · FCC compliant
- Certified to the high efficacy requirements of California Title 24 JA8-2022













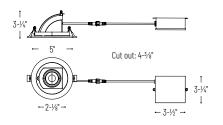


| Performance Data | | | | |
|------------------|--------|-------|--|--|
| Part Number | Lumens | CCT | | |
| NM4-R47027BB | 887lm | 2700K | | |
| NM4-R47027MPW | 942lm | 2700K | | |
| NM4-R47030BB | 932lm | 3000K | | |
| NM4-R47030MPW | 970lm | 3000K | | |

Delivered lumens will vary depending on optic

PRODUCT IMAGES AND DIMENSIONS







NM4-SET Square Trim

4" M4 Round LED Recessed Elbow

| Trim Type | Color Temperature | Finish |
|---------------------------|-------------------|---------------------------------|
| NM4-R470 = 4" Round Elbow | 27 = 2700K | BB = Matte Black |
| | 30 = 3000K | MPW = Matte Powder White |

NM4-R470 Trim Accessories

| Finish |
|---------------------------------|
| B = Matte Black |
| MPW = Matte Powder White |
| |

Optional Mounting Accessories

Accessory Type

NF-R246 = Universal New Construction Frame-In NFC-R430 = New Construction Frame-In with Collar NM2-EW-4 = 4' Quick Connect Extension Cable NM2-EW-10 = 10' Quick Connect Extension Cable

Example: NM4-R47030MPW = 4" M4 Round LED Recessed Elbow, 950lm / 12W, 3000K, Matte Powder White



NM4-R470

4" M4 Round LED Recessed Elbow Accessories

Type
Project
Catalog No.
Notes



Square Trim for NM4-R470

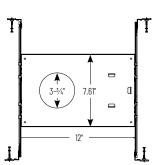
NM4-SETB Matte Black
NM4-SETMPW Matte Powder White
Converts the round trim included with
NM4-R470 elbow into a square trim



New Construction Frame-In

NF-R375

For new construction pre-wiring and easier layout planning.

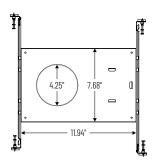




New Construction Frame-In with Collar

NFC-R430

New construction frame-in can be used to assist installing can-less recessed downlighting.





Quick Connect Extension Linkable Cables

NM2-EW-4 NM2-EW-10

4' Cable 10' Cable

Use to extend the length between luminaire and driver enclosure. Can be connected together to create custom lengths. Maximum length between luminaire and driver is 40°.

PHOTOMETRICS

NM4-R470

4" M4 Round LED Recessed Elbow

Туре

Project

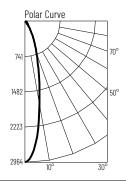
Catalog No.

Notes

Test Information

Pest Number: NTR187IR1
Part Number: NM4-R47027MPW
Beam Spread: 24° Spot
Lumens: 935Im
Wattage: 11.74W
Efficacy: 80Ipw
CCT / CRI: 2700K / 90 CRI

Spacing Criteria (0°-180°): 0.42 Spacing Criteria (90°-270°): 0.42



| Illuminance | at a | Distance |
|-------------|------|----------|
| | | |

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|----------------------------|-------------|---------------|
| 4' | 185fc | 1'-8" |
| 6' | 82.2fc | 2'-7" |
| 8' | 46.2fc | 3'-6" |
| 10' | 29.6fc | 4'-4" |
| 12' | 20.5fc | 5'-2" |

Zonal Lumen Summary

| Zone | Lumens | % Luminaire | | |
|--------|--------|----------------|--|--|
| 0-30 | 721 | 77 | | |
| 0-40 | 807 | 86.2 | | |
| 0-60 | 899 | 96.1 | | |
| 0-90 | 935 | 100 | | |
| 90-180 | 0 | 0 | | |
| 0-180 | 935 | 100 | | |
| | | | | |

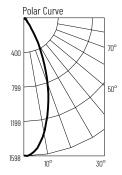
Candela Table

| Candela Table | | |
|--------------------|---------|--|
| Vertical Angles | Candela | |
| 0 | 2958 | |
| 5 | 2607 | |
| 15 | 1124 | |
| 25 | 398 | |
| 35 | 128 | |
| 45 | 67 | |
| | | |

Test Information

Test Number: NTR1872R1 Part Number: NM4-R47027MPW Beam Spread: 40° Narrow Flood Lumens: 942Im

Wattage: 11.74W
Efficacy: 80lpw
CCT / CRI: 2700K / 90 CRI
Spacing Criteria (0°-180°): 0.66
Spacing Criteria (90°-270°): 0.66



Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|----------------------------|-------------|---------------|
| 4' | 99.7fc | 3' |
| 6' | 44.3fc | 4'-5" |
| 8' | 24.9fc | 5'-11" |
| 10' | 15.9fc | 7'-5" |
| 12' | 11.1fc | 8'-11" |

Zonal Lumen Summary

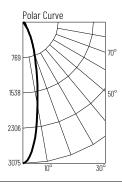
| Zone | Lumens | % Luminaire |
|--------|--------|----------------|
| 0-30 | 697 | 74 |
| 0-40 | 819 | 86.9 |
| 0-60 | 912 | 96.7 |
| 0-90 | 942 | 100 |
| 90-180 | 0 | 0 |
| 0-180 | 942 | 100 |

Candela Table

| Vertical Angles | Candela |
|--------------------|---------|
| 0 | 1595 |
| 5 | 1516 |
| 15 | 1076 |
| 25 | 568 |
| 35 | 200 |
| 45 | 66 |
| | |

Test Information

Test Number: NTR1875R1
Part Number: NM4-R47030MPW
Beam Spread: 24° Spot
Lumens: 958Im
Wattage: 11.51W
Efficacy: 83Ipw
CCT / CRI: 3000K / 90 CRI
Spacing Criteria (0°-180°): 0.42
Spacing Criteria (90°-270°): 0.42



Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | | r | Beam Diameter |
|----------------------------|-------------|--------|---|---------------|
| 4' | | 192fc | | 1'-8" |
| 6' | | 85.3fc | | 2'-7" |
| 8' | | 48fc | | 3'-5" |
| 10' | | 30.7fc | | 4'-4" |
| 12' | | 21.3fc | | 5'-2" |

Zonal Lumen Summary

| Zone | Lumens | % Luminaire |
|--------|--------|----------------|
| 0-30 | 733 | 76.6 |
| 0-40 | 823 | 85.9 |
| 0-60 | 920 | 96.1 |
| 0-90 | 958 | 100 |
| 90-180 | 0 | 0 |
| 0-180 | 958 | 100 |

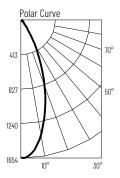
Candela Table

| Vertical Angles | Candela |
|--------------------|---------|
| 0 | 3072 |
| 5 | 2688 |
| 15 | 1183 |
| 25 | 449 |
| 35 | 149 |
| 45 | 73 |
| | |

Test Information

Test Number: NTR1876R1 Part Number: NM4-R47030MPW Beam Spread: 40° Narrow Flood Lumens: 970Im Wattage: 11.56W

Efficacy: 84lpw CCT / CRI: 3000K / 90 CRI Spacing Criteria (0°-180°): 0.66 Spacing Criteria (90°-270°): 0.66



Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|----------------------------|-------------|---------------|
| 4' | 103fc | 2'-11" |
| 6' | 45.9fc | 4'-5" |
| 8' | 25.8fc | 5'-11" |
| 10' | 16.5fc | 7'-4" |
| 12' | 11.5fc | 8'-10" |

Zonal Lumen Summary

| Zone | Lumens | % Luminaire |
|--------|--------|----------------|
| 0-30 | 716 | 73.8 |
| 0-40 | 841 | 86.7 |
| 0-60 | 939 | 96.8 |
| 0-90 | 970 | 100 |
| 90-180 | 0 | 0 |
| 0-180 | 970 | 100 |
| | | |

Candela Table

| Vertical Angles | Candela |
|--------------------|---------|
| 0 | 1651 |
| 5 | 1594 |
| 15 | 1120 |
| 25 | 559 |
| 35 | 176 |
| 45 | 56 |
| | |

Finish Multiplier

Finish: Black (x0.95), Matte Powder White (x1.0)

