



# MINI LED DOWNLIGHT

## MD1LG2 (RD) RECESSED HOUSING AND TRIM

### LOW VOLTAGE

Project: \_\_\_\_\_

Fixture Type: \_\_\_\_\_

Location: \_\_\_\_\_

Contact/Phone: \_\_\_\_\_

### PRODUCT DESCRIPTION

The round MD1LG2 Mini LED recessed downlight is IC rated for insulated or non-insulated applications • Sleek, compact form factor provides direct accent lighting with low glare optic system that approximates the light output and distribution of 20W halogen lamps • Ideal for both residential and commercial limited space applications including niches, bookshelves, displays and cabinets • Remote mount Class 2 120V to 12V AC electronic or magnetic transformer required • Designed to provide 50,000 hours of life • 5 year limited warranty on LED components.

### ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT

- No harmful ultraviolet or infrared wavelengths
- No lead or mercury
- Comparable light output to 20W MR11 halogen lamps while consuming 5W

### PRODUCT SPECIFICATIONS

**LED Light Engine** High performance, low power LEDs provide outstanding reliability, performance and color quality/consistency • 2700K, 3000K, 3500K or 4000K color temperatures available • 80 or 90 CRI minimum.

**Optical System** Fixtures are offered with a choice of spot, narrow flood or flood beam patterns • LED source concealed with lensed optic is deeply recessed into an internal reflector to produce a low glare system • Reflectors finished to match trim ring color for uniform appearance • Field replacement of optical lenses is NOT recommended.

**Transformer** Requires remote mount Class 2, 120V to 12V AC electronic or magnetic transformer for operation • Juno [TL602E](#) electronic transformer and [MAGXFMR](#) magnetic transformer are designed specifically for use with these fixtures.

**Dimming** May be dimmed with dimmers tested and qualified by Juno for use with [TL602E](#) and [MAGXFMR](#) – see transformer specifications for compatible dimmers • Color temperature remains constant over dimming range • Consult factory for additional information.

**Life** Rated for 50,000 hours at 70% lumen maintenance.

**Labels** UL listed for indoor damp locations and daisy chaining • Union made • UL and cUL listed • RoHS compliant.

**Testing** All reports are based on published industry procedures; field performance may differ from laboratory performance. Specifications subject to change without notice.

### HOUSING FEATURES

**Housing** Designed for use in IC (insulated ceiling) or non-IC construction • Die cast aluminum housing.

**Wiring Compartment** Provided with removable access plate • Four pole terminal block allows for quick, secure connection • UL /cUL listed for daisy chaining • Easy to wire with commonly available low voltage cable (Type CL2 or NEC equivalent, 18-12 AWG). Consult local codes for compliant wiring methods.

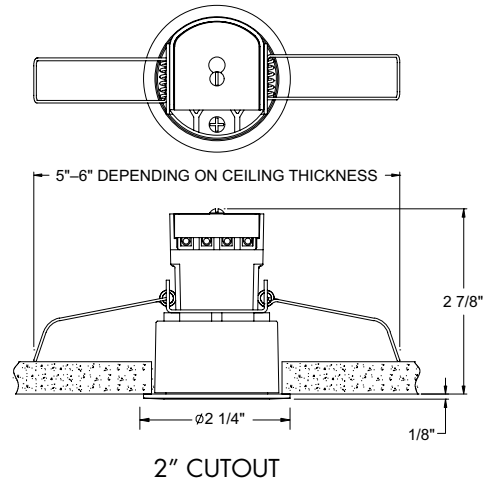
**Mounting** Tempered spring steel torsion clips are provided fully assembled to housing • Springs allow for fast, secure installation or removal in mounting surfaces from 1/8" to 1" thick material • 2" Cutout dimension corresponds to common hole saw size.

### ELECTRICAL DATA

|               |                         |
|---------------|-------------------------|
| Input Voltage | 12VAC                   |
| Input Power   | 4.8W                    |
| Input Current | 0.42A                   |
| Frequency     | Varies with Transformer |



### DIMENSIONS



### ORDERING INFORMATION

Example: MD1LG2 RD 03LM 27K 80CRI FL WH

| Series | Fixture Form | Lumens                  | Color Temperature |
|--------|--------------|-------------------------|-------------------|
| MD1LG2 | RD Round     | 03LM 300 Nominal Lumens | 27K 2700K         |
|        |              |                         | 30K 3000K         |
|        |              |                         | 35K 3500K         |
|        |              |                         | 40K 4000K         |

| CRI           | Distribution     | Trim Finish     |
|---------------|------------------|-----------------|
| 80CRI 80+ CRI | FL Flood         | BL Black        |
| 90CRI 90+ CRI | NFL Narrow Flood | BZ Bronze       |
|               | SP Spot          | SN Satin Nickel |
|               |                  | WH White        |

### Transformers

| Catalog Number             | Finish | Description                       |
|----------------------------|--------|-----------------------------------|
| TL602E 10W 120 12AC WH     | White  | 10W 12V AC Electronic Transformer |
| TL602E 25W 120 12AC WH     | White  | 25W 12V AC Electronic Transformer |
| TL602E 60W 120 12AC WH     | White  | 60W 12V AC Electronic Transformer |
| MAGXFMR 1C 10W 120 12AC BL | Black  | 10W 12V AC Magnetic Transformer   |
| MAGXFMR 1C 25W 120 12AC BL | Black  | 25W 12V AC Magnetic Transformer   |
| MAGXFMR 1C 60W 120 12AC BL | Black  | 60W 12V AC Magnetic Transformer   |

To order, specify catalog number.

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### LOW VOLTAGE

#### PHOTOMETRICS

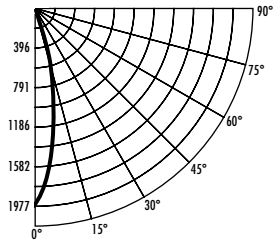
##### PHOTOMETRIC REPORT

Test Report #: PT10130702R

Catalog No: MD1LG2 RD 03LM  
35K 80CRI SP WH

Luminaire Spacing Criterion: 0.34

Luminaire LPW: 64



##### CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0°   |
|------------------|------|
| 0                | 1977 |
| 5                | 1648 |
| 15               | 421  |
| 25               | 80   |
| 35               | 17   |
| 45               | 6    |
| 55               | 3    |
| 65               | 1    |
| 75               | 1    |
| 85               | 0    |
| 90               | 0    |

Multiplier: 80CRI 90CRI  
27K - 0.91 27K - 0.67  
30K - 0.95 27K - 0.72  
35K - 1.00 35K - 0.77  
40K - 1.01 40K - 0.80

##### AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60" x 60" room)

Ceiling 80%, Wall 50%, Floor 20%

| Spacing | RCR1 | RCR4 | RCR8 |
|---------|------|------|------|
| 4'      | 23   | 21   | 19   |
| 5'      | 14   | 13   | 12   |
| 6'      | 10   | 9    | 9    |
| 7'      | 8    | 7    | 7    |
| 8'      | 6    | 6    | 5    |
| 9'      | 5    | 4    | 4    |
| 10'     | 4    | 3    | 3    |

##### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 297    | N/A   | 93.3     |
| 0-40° | 309    | N/A   | 96.9     |
| 0-60° | 316    | N/A   | 99.2     |
| 0-90° | 319    | N/A   | 100.0    |

##### INITIAL FOOTCANDLES

One Unit, 5W, 19.4° Beam

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4                                    | 123.6                   | 1.4'          |
| 6                                    | 54.9                    | 2.1'          |
| 8                                    | 30.9                    | 2.7'          |
| 10                                   | 19.8                    | 3.4'          |

##### LUMINANCE (Average cd/m<sup>2</sup>)

| Degrees | Average 0° Luminance |
|---------|----------------------|
| 45      | 12095                |
| 55      | 6710                 |
| 65      | 4720                 |
| 75      | 4407                 |
| 85      | 1634                 |

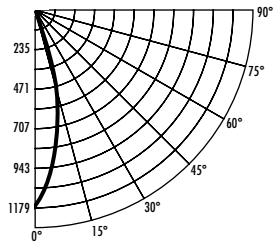
##### PHOTOMETRIC REPORT

Test Report #: PT10130703R

Catalog No: MD1LG2 RD 03LM  
35K 80CRI NFL WH

Luminaire Spacing Criterion: 0.42

Luminaire LPW: 61



##### CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0°   |
|------------------|------|
| 0                | 1179 |
| 5                | 1044 |
| 15               | 436  |
| 25               | 122  |
| 35               | 30   |
| 45               | 9    |
| 55               | 3    |
| 65               | 2    |
| 75               | 1    |
| 85               | 0    |
| 90               | 0    |

Multiplier: 80CRI 90CRI  
27K - 0.91 27K - 0.67  
30K - 0.95 30K - 0.72  
35K - 1.00 35K - 0.77  
40K - 1.01 40K - 0.80

##### AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60" x 60" room)

Ceiling 80%, Wall 50%, Floor 20%

| Spacing | RCR1 | RCR4 | RCR8 |
|---------|------|------|------|
| 4'      | 21   | 19   | 17   |
| 5'      | 14   | 12   | 11   |
| 6'      | 9    | 9    | 8    |
| 7'      | 8    | 7    | 6    |
| 8'      | 6    | 5    | 5    |
| 9'      | 5    | 4    | 4    |
| 10'     | 3    | 3    | 3    |

##### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 270    | N/A   | 88.9     |
| 0-40° | 290    | N/A   | 95.5     |
| 0-60° | 300    | N/A   | 98.9     |
| 0-90° | 304    | N/A   | 100.0    |

##### INITIAL FOOTCANDLES

One Unit, 5W, 24.6° Beam

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4                                    | 73.7                    | 1.7'          |
| 6                                    | 32.8                    | 2.6'          |
| 8                                    | 18.4                    | 3.5'          |
| 10                                   | 11.8                    | 4.4'          |

##### LUMINANCE (Average cd/m<sup>2</sup>)

| Degrees | Average 0° Luminance |
|---------|----------------------|
| 45      | 17336                |
| 55      | 7952                 |
| 65      | 6071                 |
| 75      | 5507                 |
| 85      | 3268                 |

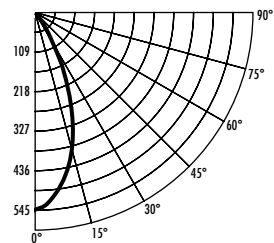
##### PHOTOMETRIC REPORT

Test Report #: PT10130704R

Catalog No: MD1LG2 RD 03LM  
35K 80CRI FL WH

Luminaire Spacing Criterion: 0.64

Luminaire LPW: 55



##### CANDLEPOWER DISTRIBUTION (Candelas)

| Degrees Vertical | 0°  |
|------------------|-----|
| 0                | 545 |
| 5                | 527 |
| 15               | 366 |
| 25               | 158 |
| 35               | 44  |
| 45               | 14  |
| 55               | 6   |
| 65               | 3   |
| 75               | 2   |
| 85               | 0   |
| 90               | 0   |

Multiplier: 80CRI 90CRI  
27K - 0.91 27K - 0.67  
30K - 0.95 30K - 0.72  
35K - 1.00 35K - 0.77  
40K - 1.01 40K - 0.80

##### AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60" x 60" room)

Ceiling 80%, Wall 50%, Floor 20%

| Spacing | RCR1 | RCR4 | RCR8 |
|---------|------|------|------|
| 4'      | 19   | 17   | 15   |
| 5'      | 12   | 11   | 10   |
| 6'      | 8    | 7    | 7    |
| 7'      | 7    | 6    | 5    |
| 8'      | 5    | 5    | 4    |
| 9'      | 4    | 4    | 3    |
| 10'     | 3    | 3    | 2    |

##### ZONAL LUMEN SUMMARY

| Zone  | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30° | 221    | N/A   | 81.2     |
| 0-40° | 251    | N/A   | 91.9     |
| 0-60° | 267    | N/A   | 98.0     |
| 0-90° | 273    | N/A   | 100.0    |

##### INITIAL FOOTCANDLES

One Unit, 5W, 38.3° Beam

| Distance to Illuminated Plane (Feet) | Footcandles Beam Center | Beam Diameter |
|--------------------------------------|-------------------------|---------------|
| 4                                    | 34.1                    | 2.8'          |
| 6                                    | 15.1                    | 4.2'          |
| 8                                    | 8.5                     | 5.6'          |
| 10                                   | 5.5                     | 6.9'          |

##### LUMINANCE (Average cd/m<sup>2</sup>)

| Degrees | Average 0° Luminance |
|---------|----------------------|
| 45      | 26205                |
| 55      | 13917                |
| 65      | 10455                |
| 75      | 9364                 |
| 85      | 4902                 |

Fixtures tested to IES recommended standard for solid state lighting per LM-79-08. Photometric performance on a single unit at 12VAC in a 25°C ambient represents a baseline of performance for the fixture. Results may vary in the field and when multiple fixtures are used in a system.