

Contact/Phone:

Project:

MINI LED DOWNLIGHT

MD1LG2 (RD) RECESSED HOUSING AND TRIM

Fixture Type:	
Location:	

LOW VOLTAGE

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 regressed 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 <u>TL602E</u> electronic transformer and <u>MAGXFMR</u> 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

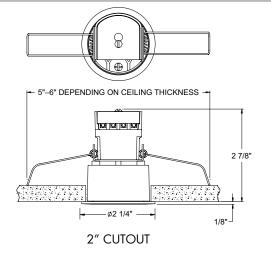
Housing Designed for use in IC (insulated ceiling) or non-IC construction Die cast aluminum housing.

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

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.



DIMENSIONS



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.

ELECTRICAL DATA

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

ORDERING INFORMATION

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

Series	Fixture Form	Lumens	Color Temperature	CRI	Distribution	Trim Finish
MD1LG2	RD Round	03LM 300 Nominal Lumens	27K 2700K	80CRI 80+ CRI	FL Flood	BL Black
			30K 3000K	90CRI 90+ CRI	NFL Narrow Flood	BRZ Bronze
			35K 3500K		SP Spot	SN Satin Nickel
			40K 4000K			WH White

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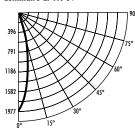
LOW VOLTAGE

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		

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		

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'	

TONIAL LUMENI CUMMADY

ZUNAL LUMEN SUMMAR I				
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	

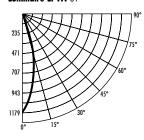
LUMINANCE (Average cd/m²)

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

85 0 90 0 Multiplier: 80CRI 90CRI 27K - 0.91 27K - 0.67 30K - 0.75 30K - 0.77 40K - 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	

INITIAL FOOTCANDLES

One Unit, 5W, 24.6° Beam

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

70NALIUMEN 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

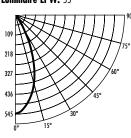
LUMINANCE (Average cd/m²)

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

PHOTOMETRIC REPORT

Test Report #: PT10130704R Catalog No: MD1L62 RD 03LM 35K 80CRI FL WH

Luminaire Spacing Criterion: 0.64 Luminaire LPW: 55



CANDLEPOWER DISTRIBUTION

90 0 0 Multiplier: 80CRI 90CRI 27K-0.91 27K-0.67 30K-0.95 30K-0.72 35K-1.01 35K-0.77 40K-1.01 40K-0.80

AVERAGE INITIAL FOOTCANDLES

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

Celling 60%, Vvali 30%, 1100i 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° Bea

One Oni, 544, 36.3 beam		Deam		
	Distance to Illuminated	Footcandles	Beam	
	Plane (Feet)	Beam Center	Diameter	
	4	34.1	2.8′	
	6	15.1	4.2'	
	8	8.5	5.6′	
	10	5.5	6.9'	

LUMINANCE (Average cd/m²)

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.