

DATE **PROJECT**

COMMENTS









PRODUCT FEATURES

MINIMAL RECESSED HEIGHT

Width: 2.0" Height: 3.5"

ONE-PIECE EXTRUDED ALUMINUM HOUSING

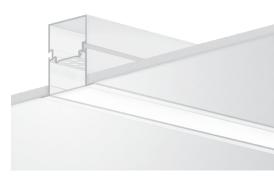
Ensures Straighter Rows and Consistent Lens Retention

MULTIPLE CEILING SYSTEMS

Engineered to be Installed within Multiple Ceiling Applications

120/277VAC 0-10 VOLT DIMMING TO 1% STANDARD

UP TO 122 LUMENS PER WATT















ORDERING GUIDE EX: 2R - 04 - MD - 30 - UNV - T1 - WH - EM[1]

ERIES	LENGTH	OUTPUT	CCT	VOLTAGE	MOUNTING	FINISH	
2R							
	XX FEET	HD 1000 LM/FT	30 3000K	UNV 120V-277V	T1 1" T GRID	WH WHITE	
	2' INCREMENTS OVERALL	MD 750 LM/FT	35 3500K	347 347V	T9 9/16" T GRID	BLK¹ BLACK	
	FIXTURE LENGTH EX: 20' = 20	LD 500 LM/FT	40 4000K		TG 1" T-TEG GRID	¹WHITE FEED CORD & COVER	
		CD CUSTOM DOWN			TG9 9/16" T-TEG GRID	PLATE STANDARD; SEE OPTIONS FOR BLACK FINISH	
		EX: CD1250=1250LM/FT			SC SCREW SLOT GRID		
					OF OVERLAPPING FLANGE		

NOTES
SEE PAGE 5 FOR ROW LAYOUTS AND MOUNTING DIMENSIONS.
ALL FIXTURES ARE SUPPLIED WITH 0-10V 1% DIMMING DRIVERS STANDARD
UNLESS SPECIFIED DIFFERENTLY IN OPTIONS SECTION.
MAXIMUM CUSTOMIZABLE LUMEN OUTPUT IS 1400 LM/FT.

OPTIONS NOTESUNITS WITH EC/EM PACKS QUANTITY MUST BE THE SAME OR LESS THAN THE TOTAL RUN FIXTURE COUNT. NOT ALL OPTIONS ARE AVAILABLE WITH OTHER OPTIONS.

OTHER OPTIONS.

"ONE SENSOR PER FIXTURE

"SENSOR COMPONENTS SUPPLIED BY OTHERS.

"NOT AVAILABLE IN 2" FIXTURES.

"NOT ALL PRODUCT VARIATIONS LISTED ON THIS PAGE ARE DLC QUALIFIED.

"ISIT WAWD DESIGNLIGHTS, ORG/SEARCH TO CONFIRM QUALIFICATION.

"PLEASE CONTACT FACTORY FOR CONFIGURATION.

OPTIONS

DIMMING & INTEGRATED CONTROLS²

ADD OPTIONS

BLANK = STANDARD 0-10V 1% DIMMING

0-10V	Lutron
EL01 0-10V 0.1% ELDOLED	LDE1 ECOSYSTEM LDE1
DALI	Integrated Controls
OSD OSRAM DEXAL	OS OCCUPANCY SENSOR
SID SIGNIFY DALI	DOS OCCUPANCY & DAYLIGHT SENSOR
ELD01 0.1% ELDOLED	LVI LUTRON VIVE

ENL³ ENLIGHTED

EC EMERGENCY CIRCUIT (ADD QUANTITIES ON THE RIGHT)

SF SPACKLE FLANGE

EM⁴ EMERGENCY BATTERY PACK (ADD QUANTITIES ON THE RIGHT)

LE LOWER ILLUMINATED EDGE

HE⁵ HIGH EFFICIENCY

CP CHICAGO PLENUM

SP⁶ SPECIAL PRODUCT CONFIGURATION





EMERGENCY BATTERY PACK QUANTITY PER RUN

PHOTOMETRICS

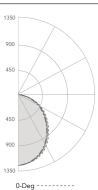
2R-04-MD-30-T1-WH

Total Lumens: 3,066 Ratio: 0% Up and 100% Down Wattage: 28.90

Efficacy: 106.1 (Lumens Per Watt) Fixture Length: Four Feet

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixt
0 - 30	928	30.3
0 - 40	1477	48.1
0 - 60	2482	80.9
0 - 90	3067	100.0
90 - 180	0	0.0
0 - 180	3067	100.0



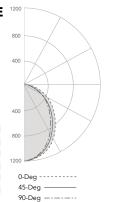
45-Deg -

2R-04-MD-30-T1-WH-LE

Total Lumens: 2,976 Ratio: 0% Up and 100% Down Wattage: 28.40 Efficacy: 104.8 (Lumens Per Watt) Fixture Length: Four Feet

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixt
0 - 30	871	39.3
0 - 40	1379	46.3
0 - 60	2291	77.0
0 - 90	2849	95.8
90 - 180	126	4.2
0 - 180	2975	100.0



ENERGY CONSUMPTION WATTS PER LINEAR FOOT

SYMMETRICAL DOWN LIGHT

	H:1000	M:750	L:500
WATTS/FT	9.55	7.23	4.73
LUMENS/FT	1022	767	511
LUMENS/W	107	106	108

SYMMETRICAL DOWN LIGHT - HE OPTION

	H:1000	M:750	L:500
WATTS/FT	8.85	6.55	4.25
LUMENS/FT	1036	778	521
LUMENS/W	117	120	122



2R RECESSED DIRECT



OPERATION

Light Engine:

The 2R is available in 3000K, 3500K & 4000K CCT all within a 2.5-Step MacAdam Ellipse and has a standard CRI of 80+.

Optics

The back-lit extruded acrylic lens ensures high efficiency light output, in a minimal form factor for a clean, evenly illuminated lower surface with minimal glare. The optional Lower Illuminated Edge lens adds an elegant accent and reduces the side glare.

Electrical:

Class 2 programmable (factory pre-set) premium power supply, 120-277VAC input. Power factor >0.9. THD <15%. Integral Surge Protection to 2KV.

Dimming:

The 2R comes standard with 0-10V dimming down to 1%.

Emergency Battery Pack:

UL Listed 924 Emergency System has been engineered to exceed UL Minimum Safety Standards. Fixture/rows will be supplied with four wire line volt & two wire low volt feed wires. Normal fixture drivers will be wired to "black" switched hot lead with a "red" un-switched through-wire wired to EM battery pack units "qty to be specified" in nomenclature string. Contractor will determine which fixture is the main feed point and terminate fixture leads as appropriate. For most fixtures, the entire direct portion of the fixture will be illuminated by the EM Battery Pack. For 10' High-Output and 12' Medium & High-Output only the first 8' of the direct portion of the fixture will be illuminated by the EM Battery Pack.

Emergency Circuit:

Emergency Circuit fixtures are engineered so that the entire fixture is wired to the emergency circuit. Row Fixtures are constructed with an extra Hot and Neutral through wire. Emergency Circuit always powers the longest fixtures in the run first. "EC Quantity" refers to the number of fixtures in the run that are wired to the emergency circuit. For example, a 20' run with EC2 selected will be shipped as (2) 8' fixtures wired to the emergency circuit and (1) 4' fixture wired to the normal circuit. Contractor is responsible for designating the feed location and terminating fixture leads appropriately.

MECHANICAL

Housing Construction:

Extruded Aluminum 6063-T5 alloy outer housing and LED tray with die-formed steel internal components for strength, alignment and mounting attachment. Our high-quality die-cast end caps are engineered to conceal all fasteners and to retain the sealing gaskets on the inside of the fixture while completing the clean and minimalistic look of this luminaire.

Alignment/Assembly:

The alignment system employs a four-point alignment and attachment method, designed to create straighter rows and minimize seams between sections (field assembled). Four alignment pins ensure the outer extruded aluminum rails are aligned, while a draw-screw secures housing-to-housing attachment.

Lengths:

The 2R is available in a minimum 2-foot (nominal) length with additional 2-foot increments available. Longer fixture rows are available and will be configured per ALL factory specifications; typical rows are configured with 4-foot, 6-foot & 8-foot fixtures. Maximum run length on one power feed is 72'. Continuous runs over 72' will require a second feed.

Mounting Method/Hardware:

The 2R is designed for lay-in grid ceilings or "Hard" sheet rock construction. Hard ceiling installations can be supplied for overlapping flange or "Trimless" spackle flange types.

Exterior Finish:

The 2R is available in White polyester powder coat finish to ensure durability.

Integrated Controls:

The 2R is available with optional integrated controls. Sensors are conveniently designed to mount in aperture and are located at the power feed end of each fixture. For runs, each fixture section will be supplied with a discrete sensor that will control that specific section.

GENERAL

Warranty:

Ten (10) Year limited warranty from date of shipment

Lumen Maintenance:

Rated for 85% initial lumen output at 85,000 Hours of operation, operated at 25C ambient temperature; per TM-21 Guidelines published by the Illuminating Engineering Society (IES).

Certifications

All Luminaires are UL and cUL listed, approved for Dry/Damp locations. All EM Units are UL 924 listed.

Select configurations with the HE option are DesignLights Consortium® Qualified for DLC Standard, please refer to www.designlights.org for details.

Shipping

2-Week lead time for orders up to 1000 Linear Feet. Orders Greater than 1,000' to be determined at time of order.

Manufactured in the USA

All ALL Luminaires and Components (with the exception of our LED boards and drivers) are proudly manufactured and assembled in the USA.

On Site Installation Notes:

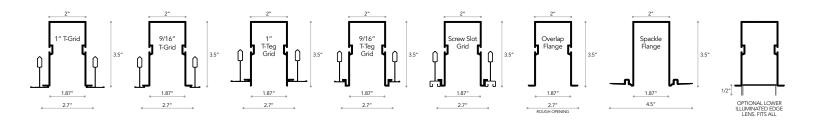
Fixture/rows will be supplied with the appropriate hardware kits to join fixtures together for specified row(s) length. End trim kits will also be suppled as required per row specifications. Please see row chart for grid specific length needed for each row length. Break off notches provided to eliminate need to cut to length. Joiner kits for "grid" applications are to be assembled to the outside of the fixture housing. "See assembly instructions" joiner kits for over lapping flange applications are to be assembled to inside of the fixture housing.



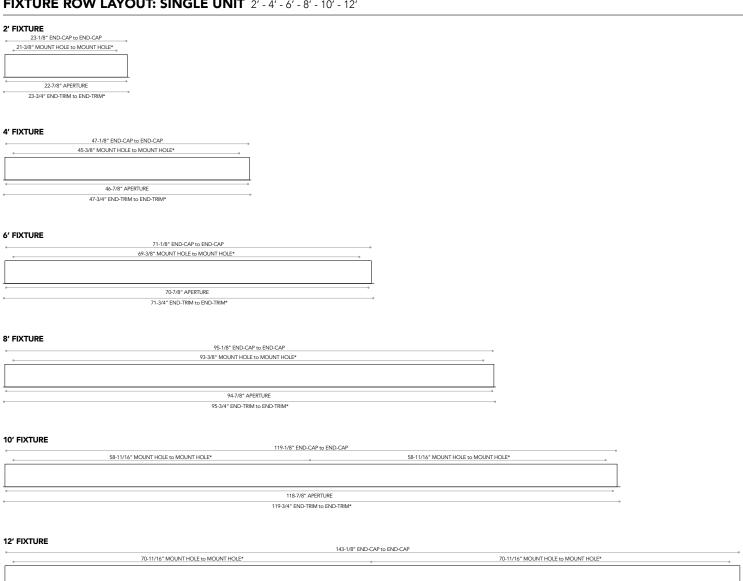




MOUNTING DETAILS



FIXTURE ROW LAYOUT: SINGLE UNIT 2' - 4' - 6' - 8' - 10' - 12'



142-7/8" APERTURE 143-3/4" END-TRIM to END-TRIM

^{*} Does not apply to the Spackle Flange fixtures.







FIXTURE ROW LAYOUT: TWO UNITS 14' - 16'

\$38* MOUNT HOLE IN MOUNT HOLE 15" \$38* MOUNT HOLE IN MOUNT HOLE	FIXTURE		166" END-CAP to END-CAP		
165-58" APSTURE 165-58" POLYTIMA IS TROTTEMA IS TROTTEMA. IS TROTTEMA IS TROTTEMA. IN TROTTEMA IS TROTTEMA IS TROTTEMA IN TROTTEMA IS TROTTEMA IN TROTTEMA IN TROTTEMA IN	93-3/8" MOUNT HOL			69-3/8" MOUNT HOLE	to MOUNT HOLE*
FIXTURE	8′ 11			6′ UN	IIT
1975			165-5/8" APERTURE		•
1907 BND CAP* to RIND CAP* 15		166	-5/8" END-TRIM to END-TRIM*		
\$2.30F MOUNT HOLE IN MOUNT H	FIXTURE		4007 51/2 010 . 51/2 010		
169-76" APERTURE 199-56" END-TRIM to END-TRIM*	93-3/8" MOUNT HOL	E to MOUNT HOLE*		93	3/8" MOUNT HOLE to MOUNT HOLE*
189-78" APRILIDE 190-58" END.TIBM to END.TIBM 190-58" END.TIBM to END.TIBM 214" END.CAP to END.CAP 15"	8′ UL				8' UNIT
1958" END.TRIM to END.TRIM 214" END.CAP to END.CAP 938" MOUNT HOLE to MOUNT HO			189-7/8" APERTI IRE		
### STURE 214" END-CAP to END-CAP 93-36" MOUNT HOLE to MOUNT HOLE					
### STATURE ### S	XTURE ROW LAYOUT: THRE	E UNITS 18' - 20' -	22' - 24'		
### STURE S' UNIT	FIXTURE	214" END-CAP to	END-CAP		
### TITURE 213-1/2* END-TRIM to END-CAP to END-CAP 93-3/8* MOUNT HOLE to MOUNT HOLE* 1.5* 45-3/8* MOUNT HOLE* to MOUNT HOLE* to MOUNT HOLE* 1.5* 45-3/8* MOUNT HOLE* to MOUNT HOLE* to MOUNT HOLE* 1.5* 45-3/8* MOUNT HOLE* to MOUNT HOLE* 1.5* 45-3/8* MOUNT HOLE* to MOUNT HOLE* 1.5* 45-3/8* MOUNT HOLE* 1.5*	93-3/8" MOUNT HOLE to MOUNT HOLE*	1.5"	69-3/8" MOUNT HOLE to MOUNT HOLE* 1.5"	45-3/8" MOUNT HOLE	to MOUNT HOLE*
213-1/2" END-TRIM to END-TRIM*	8' UNIT		6' UNIT	4' UNI	Г
238" END-CAP to END-CAP 93.3/8" MOUNT HOLE to MOUNT HOLE* 8' UNIT 8' UNIT 8' UNIT 1.5" \$ 93.3/8" MOUNT HOLE* to MOUNT HOLE* 236-11/16" APERTURE 237-1/2" END-TRIM to END-TRIM* EXTURE 262" END-CAP to END-CAP 93.3/8" MOUNT HOLE to MOUNT HOLE* 8" 69.3/8" MOUNT HOLE to MOUNT HOLE 8" UNIT 6' UNIT		212-11/16" API	ERTURE		
238" END-CAP to END-CAP 93-3/8" MOUNT HOLE to MOUNT HOLE 8' UNIT 8' UNIT 4' UNIT 236-11/16" APERTURE 237-1/2" END-TRIM to END-TRIM* FIXTURE 262" END-CAP to END-CAP 93-3/8" MOUNT HOLE to MOUNT HOLE 8' UNIT 8' UNIT 6' UNIT 6' UNIT 6' UNIT		213-1/2" END-TRIM t	o END-TRIM*		·
93-3/8" MOUNT HOLE to MOUNT HOLE 10 MOUNT	FIXTURE	236	" FND-CAP to FND-CAP		
236-11/16" APERTURE 237-1/2" END-TRIM to END-TRIM* FIXTURE 262" END-CAP to END-CAP 93-3/8" MOUNT HOLE to MOUNT HOLE* 8" 93-3/8" MOUNT HOLE to MOUNT HOLE t	93-3/8" MOUNT HOLE to MOUNT HOLE*			1.5"	45-3/8" MOUNT HOLE to MOUNT HOLE*
237-1/2" END-TRIM 10 END-TRIM* FIXTURE 262" END-CAP to END-CAP 93-3/8" MOUNT HOLE to MOUNT HOLE* 8" 93-3/8" MOUNT HOLE to MOUNT HOLE* 8' UNIT 6' UNIT	8' UNIT		8' UNIT		4' UNIT
262" END-CAP to END-CAP 93-3/8" MOUNT HOLE to MOUNT HOLE* 8" 93-3/8" MOUNT HOLE to M			236-11/16" APERTURE		•
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262" END-CAP to END-CAP 93-3/8" MOUNT HOLE to MOUNT HOLE* 8" 93-3/8" MOUNT HOLE to MOUNT HOLE* 8" 69-3/8" MOUNT HOLE to MOUNT HOLE 6' UNIT					
8' UNIT 8' UNIT 6' UNIT	FIXTURE		262" END-CAP to END-CAP		
	93-3/8" MOUNT HOLE to MOUNT HOLE*		93-3/8" MOUNT HOLE to MOUNT HOLE*		69-3/8" MOUNT HOLE to MOUNT HOLE
AVAILABLE DEED IN	8' UNIT		8' UNIT		6' UNIT
Z6U-T1/16" AP'EKTURE	0 01111				

2" END-CAP to END-CAP

93-3/8" MOUNT HOLE to MOUNT HOLE*

284-11/16" APERTURE 285-1/2" END-TRIM to END-TRIM

 $\mbox{\ensuremath{^{\star}}}$ Does not apply to the Spackle Flange fixtures.

93-3/8" MOUNT HOLE to MOUNT HOLE*

8' UNIT

24' FIXTURE

93-3/8" MOUNT HOLE to MOUNT HOLE*

8' UNIT







FIXTURE ROW COMPONENTS

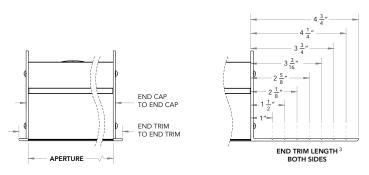
ROW LENGTH	2′	4′	6'	8′	10′	12′	JOIN KITS	APERTURE FLANGE & GRID	END-CAP TO END-CAP	END-	TRIM TO EN	D-TRIM SPACKLE FLANGE	END-TRIM LENGTH GRID (EACH SIDE)	CEILING CUT-OUT LENGTH
2′	1	-	-	-	-	-	-	22-7/8"	23-1/4"	23-3/4"	23-3/4"	25-3/4"	-	23-1/2"
4′	-	1	-	-	_	-	-	46-7/8"	47-1/4"	47-3/4"	47-3/4"	49-3/4"	-	47-1/2"
6′	-	-	1	-	_	-	-	70-7/8	71-1/4"	71-3/4"	71-3/4"	73-3/4"	-	71-1/2"
8′	-	-	-	1	-	-	-	94-7/8"	95-1/4"	95-3/4"	95-3/4"	97-3/4"	-	95-1/2"
10′	-	-	-	-	1	-	-	118-7/8"	119-1/4"	119-3/4"	119-3/4"	121-3/4"	-	119-1/2"
12′	-	-	-	-	_	1	-	142-7/8"	143-1/4"	143-3/4"	143-3/4"	145-3/4"	-	143-1/2"
14′	-	-	1	1	-	-	1	165-7/8"	166-1/4"	166-3/4"	167-3/4"	168-3/4"	1-00"	167-1/8"
16′	-	-	-	2	_	-	1	189-3/4"	190-1/8"	190-5/8"	191-3/4"	192-5/8"	1-00"	191-00"
18′	-	1	1	1	_	-	2	212-11/16"	213-1/16"	213-9/16"	215-3/4"	215-9/16"	1-1/2"	213-15/16"
20′	-	1	-	2	_	-	2	236-11/16"	237-1/16"	237-9/16"	239-3/4"	239-9/16"	1-1/2"	237-15/16"
22′	-	-	1	2	_	-	2	260-11/16"	261-1/16"	261-9/16"	263-3/4"	263-9/16"	1-1/2"	261-15/16"
24′	-	-	-	3	_	-	2	284-5/8"	285-00"	285-1/2"	287-3/4"	287-1/2"	1-1/2"	285-7/8"
26′	-	1	1	2	_	-	3	307-5/8"	308-00"	308-1/2"	311-3/4"	310-1/2"	2-1/8"	308-7/8"
28′	-	1	-	3	_	-	3	331-5/8"	332-00"	332-1/2"	335-3/4"	334-1/2"	2-1/8"	332-7/8"
30'	-	-	1	3	_	-	3	355-5/8"	356-00"	356-1/2"	359-3/4"	358-1/2"	2-1/8"	356-7/8"
32'	-	-	-	4	_	-	3	379-5/8"	380-00"	380-1/2"	383-3/4"	382-1/2"	2-1/8"	380-7/8"
34'	-	1	1	3	_	-	4	402-1/2"	402-7/8"	403-3/8"	407-3/4"	405-3/8"	2-5/8"	403-3/4"
36′	-	1	-	4	_	-	4	426-1/2"	426-7/8"	427-3/8"	431-3/4"	429-3/8"	2-5/8"	427-3/4"
38′	-	-	1	4	_	-	4	450-1/2"	450-7/8"	451-3/8"	455-3/4"	453-3/8"	2-5/8"	451-3/4"
40'	-	-	-	5	_	-	4	474-1/2"	474-7/8"	475-3/8"	479-3/4"	477-3/8"	2-5/8"	475-3/4"
42'	-	1	1	4	_	-	5	497-7/16"	497-13/16"	498-5/16"	503-3/4"	500-5/16"	3-3/16"	498-11/16"
44'	-	1	-	5	_	-	5	521-7/16"	521-13/16"	522-5/16"	527-3/4"	523-5/16"	3-3/16"	522-11/16"
46′	-	-	1	5	_	-	5	545-7/16	545-13/16"	546-5/16"	551-3/4"	548-5/16"	3-3/16"	546-11/16"
48′	-	_	_	6	_	_	5	569-7/16"	569-13/16"	570-5/16"	575-3/4"	572-5/16"	3-3/16"	570-11/16"
50′	-	1	1	5	_	-	6	592-3/8"	592-3/4"	593-1/4"	599-3/4"	595-1/4"	3-3/4"	593-5/8"
52′	-	1	_	6	_	-	6	616-3/8"	616-3/4"	617-1/4"	623-3/4"	619-1/4"	3-3/4"	617-5/8"
54'	-	-	1	6	_	-	6	640-3/8"	640-3/4"	641-1/4"	647-3/4"	643-1/4"	3-3/4"	641-5/8"
56′	-	-	-	7	T.	-	6	664-3/8"	664-3/4"	665-1/4"	671-3/4"	667-1/4"	3-3/4"	665-5/8"
58′	-	1	1	6	_	_	7	687-1/4"	687-5/8"	688-1/8"	695-3/4"	690-1/8"	4-1/4"	688-1/2"
60′	_	1	_	7	_	_	7	711-1/4"	711-5/8"	712-1/8"	719-3/4"	714-1/8"	4-1/4"	712-1/2"
62'	-	-	1	7		-	7	735-1/4"	735-5/8"	736-1/8"	743-3/4"	738-1/8"	4-1/4"	736-1/2"
64'	_	_	-	8		-	7	759-1/4"	759-5/8"	760-1/8"	767-3/4"	762-1/8"	4-1/4"	760-1/2"
66′	_	1	1	7	-	_	8	782-1/8"	782-1/2"	783-00"	791-3/4"	785-00"	4-3/4"	783-3/8"
68′	-	1	-	8		-	8	806-1/8"	806-1/2"	807-00"	815-3/4"	809-00"	4-3/4"	807-3/8"
70′	_	-	1	8	_	_	8	830-1/8"	830-1/2"	831-00"	839-3/4"	833-00"	4-3/4"	831-3/8"
72′	_	_	_	9		_	8	854-1/8"	854-1/2"	855-00"	863-3/4"	857-00"	4-3/4"	855-3/8"

Note 1

Flange Mount Fixtures have Mounting Holes 7/8" from End-Cap

Note 2

Flange Mount Fixture Rows Consisting of Multiple Units (16'-72') have 1.5" O.C. Between Mounting Holes at Fixture Joints



Note 3

For rows over 12', Score along the groove and break off the extra sections of the end caps to match the dimension in the table.

Note 4

Ceiling cut-out width is 2-3/8" for Overlap Flange and 3-1/4" for Spackle Flange.