MX2R LED
2″ Continuous – Recessed

Williams

3-3/4″

2-1/8″

T-bar 3-1/4″ O.C.

MX2RG Shown

CATALOG #: _____

TYPE: _____

PROJECT: _____

BUY AMERICAN ACT COMPLIANT · CCEA Approved · WET/CC · BiOS ILLUMINATED

FEATURES

- Create elegant spaces with a seamless, continuous row of illumination
- Specify in one inch increments to create a perfect fit
- Flat, glowing edge, drop and regressed lenses give designers a variety of looks
- High-performance up to 125 lm/W
- Linear extrusion contains snap-in light rails for ease of installation and maintenance
- Versatile MX2 system includes recessed, surface, suspended and in-wall mounting, see hew.com
- Corner configurations available, see Product Builder at hew.com/product-builder
- Diffuse acrylic lens provides uniform illumination for visual comfort
- Wireless in-fixture control solutions available
- Available with BIOS® SkyBlue® technology to support proper daytime circadian stimulus
- Made Right Here® in the USA

SPECIFICATIONS

- **HOUSING** – Extruded aluminum.
- **SHIELDING** – Extruded, flat, diffuse acrylic lens.
- **FINISH** – 92% minimum average reflective white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- **ELECTRICAL** – High-quality mid-power LED boards. Reported L70: >54,000 hours. Reported L90: 52,000 hours. Estimated L70: 170,000 hours.
- **MOUNTING** – MX2RT: Drywall mount allowing for ceiling materials 1/4″ - 1-1/4″ thick. Fixture to be installed prior to drywall or finished ceiling material. MX2RG: NEMA Type "G" 15/16″ or 1″ grid standard. MX2SG: NEMA Type "SS" 9/16″ grid standard.
- **LISTINGS** –
  - cCSAus certified as luminaire suitable for dry or damp locations.
  - City of Chicago Environmental Air approved when specified with CP option.
  - Complies with the Buy American Act and other federal regulations. Request certification at hew.com/baa.
- **WARRANTY** – 5-year limited warranty, see hew.com/warranty.

ORDERING EXAMPLE: MX2RTR - 8′00 - L8/835 - F - OPTIONS - CONTROL/DIM - UNV

SERIES	FIXTURE STYLE	LENGTH
MX2R	**TR** Drywall or Hard Surface - Trim **TL** Drywall or Hard Surface - Trimless **G** Grid [1] **SG** Slot Grid [2]	Lengths specified in feet and inches using 1″ increments, 2′ minimum. Example: **8′00** = 8′-0″

Product Builder

Easily build shapes & simplify ordering with the Williams Linear Product Builder at hew.com/product-builder [3]

LUMENS [4]	CRI	CCT	SHIELDING [5]	OPTIONS
L4 400lm **L8** 800lm **L10** 1000lm	**8** 80 **9** 90 [6]	**27** 2700K **30** 3000K **35** 3500K **40** 4000K **50** 5000K	**F** Flat, diffuse acrylic **FW** Flat, diffuse acrylic with widespread optic **G** Diffuse acrylic with glowing edge **D** Diffuse acrylic with 1″ drop **R** Regressed diffuse acrylic, 1″ [7]	**EM/10WLP** Low-profile 10-watt emergency battery [8] **EM/10WRM** Remote mount 10-watt emergency battery **(L__)** Additional lower lumen packages available [9] Example: 600 lumens = MX2RTR-8′00-L8/835-**(L6)** **WET/CC** Wet location under covered ceiling **CP** Chicago Plenum (CCEA)

CONTROL [10]

See page 5 for ADDITIONAL CONTROL OPTIONS.

–	None
AVI-LVFA	Avi-on wireless fixture control [11]
AVI-LVFA-CS2-PIR	Avi-on wireless fixture control with PIR motion and daylight sensor [12]
AWNR	Lutron Athena wireless node integral fixture control, RF only [13]
AWNS	Lutron Athena wireless node integral fixture control, RF with daylight and occupancy sensing [14]

DRIVER

See page 6 for ADDITIONAL DRIVER OPTIONS.

DIM	Driver with external dimming wires
DA	Driver with 12V auxiliary power, without external dimming wires [15]
DSR	Sensor-ready driver without external dimming wires (D4i DALI-2) [16]

VOLTAGE

120	120V
277	277V
UNV	120-277V
347	347V [17]

NOTES

1. Earthquake clips provided.
2. Earthquake clips provided.
3. See page 3 for CORNER DETAILS.
4. Lumens per foot output based on F Shielding, 80 CRI/3500K CCT. Actual performance may vary ± 5%. See page 2 for FIXTURE PERFORMANCE DATA. Additional lumen packages available, see Options.
5. G, D, and R Shielding not available with corner configurations. See page 3 for SHIELDING DETAILS.
6. Extended lead times may apply. Consult factory for availability.
7. Increases fixture height. See page 3 for SHIELDING DETAILS.
8. Not available with fixtures less than 4′.
9. (L4) lumen package minimum. Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
10. Reduces portion of lit fixture, consult factory. See page 4 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS. See page 3 for SENSOR & NODE PLACEMENT DETAILS.
11. DA Driver only.
12. DA Driver only.
13. DA and DSR Drivers only.
14. DA and DSR Drivers only.
15. Avi-on and Lutron Athena Controls only.
16. Lutron Vive and Athena Controls only.
17. Not available with EM batteries, control sensors, DA, or DSR Drivers.

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MX2R LED
2″ Continuous – Recessed

FIXTURE PERFORMANCE DATA

PER FOOT			
	DELIVERED LUMENS	**WATTAGE**	**EFFICACY (lm/W)**
L4	421.5	3.4	124
L8	843.0	6.7	126
L10	1264.5	10.1	125

- Photometrics tested in accordance with IESNA LM-79. Results based on F shielding, 80 CRI/3500K CCT, average wattage for 120V through 277V input, and 25°C ambient temperature. Actual performance may vary +/-5%.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier tables to calculate additional options.

MULTIPLIER TABLES

COLOR TEMPERATURE		
	CCT	**CONVERSION FACTOR**
80 CRI	2700K	0.97
	3000K	0.99
	3500K	1.00
	4000K	1.03
	5000K	1.06
90 CRI	2700K	0.80
	3000K	0.82
	3500K	0.83
	4000K	0.86
	5000K	0.89

| SHIELDING		
LENS	**CONVERSION FACTOR**	
D	1.05	
F	1.00	
G	0.98	
FW	0.92	
R	0.91	

PHOTOMETRY

MX2RG-4′00-L8/835-F-DIM Total Luminaire Output: 3373 lumens; 27 Watts | Efficacy: 125 lm/W | 80 CRI; 3500K CCT
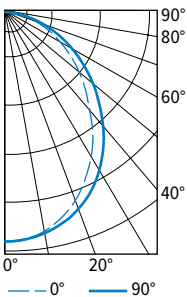
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	**45°**	**90°**	
0	1460	1460	1460	
5	1451	1447	1446	138
15	1384	1371	1351	386
25	1250	1213	1167	558
35	1047	991	939	621
45	810	752	699	584
55	588	540	497	486
65	382	350	322	348
75	194	182	169	194
85	48	52	52	58
90	1	6	9	

ZONE	LUMENS	% FIXTURE
0 - 30	1082	32
0 - 40	1702	51
0 - 60	2772	82
0 - 90	3372	100
0 - 180	3372	100

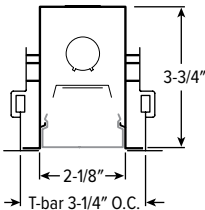**MX2RG-4′00-L10/835-FW-DIM** Total Luminaire Output: 4148 lumens; 40.4 Watts | Efficacy: 103 lm/W | 80 CRI; 3500K CCT
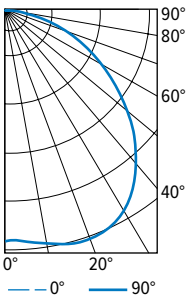
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	**45°**	**90°**	
0	1372	1372	1372	
5	1386	1371	1375	131
15	1315	1372	1432	389
25	1184	1333	1428	608
35	1010	1224	1308	744
45	813	1036	1076	762
55	618	792	799	671
65	418	543	532	501
75	214	275	266	272
85	42	56	56	64
90	1	2	3	

ZONE	LUMENS	% FIXTURE
0 - 30	1129	27
0 - 40	1873	45
0 - 60	3306	80
0 - 90	4143	100
0 - 180	4148	100

CROSS SECTIONS

MX2RG

3-3/4″
2-1/8″
T-bar 3-1/4″ O.C.

MX2RT

3-5/8″
Adjusts from 1/4″ to 1-1/4″ max. (1/8″ increments)
2-1/8″
Trim: 3-7/8″
Trimless: 4-1/16″
5″ Stud O.C.

MX2RSG

3-3/4″
2-1/8″
3-1/16″
5/16″
3-5/8″ Slot grid centers
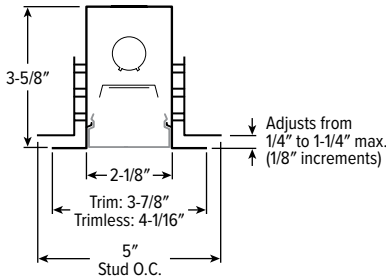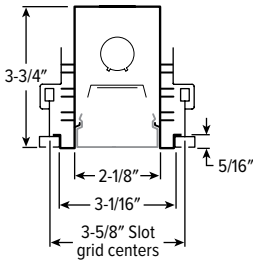
MX2RSG (9/16″ Narrow Face Tees)

1-1/2″ Tall, 9/16″ narrow face tee
Acoustical tile (by others)
3-5/8″ O.C.

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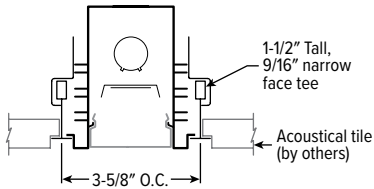
MX2R LED
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SHIELDING DETAILS

FLAT

GLOWING EDGE

DROP

3/8″

1″

REGRESSED

MX2RG | MX2SG

4-3/4″

1″

MX2RT

4-5/8″

1″
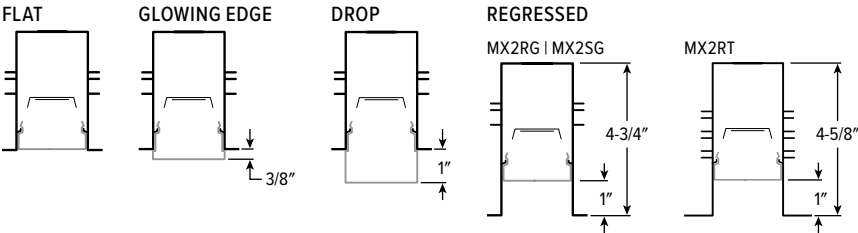
FIXTURE DETAILS

BACK VIEWS

MX2RT

(3) ø1/4″ mounting holes

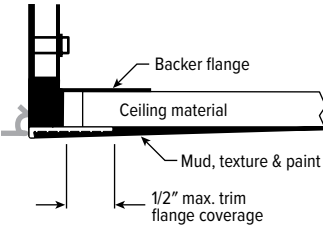Backer flange (both sides)
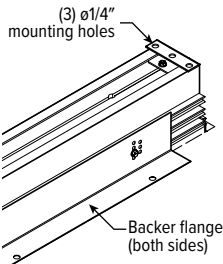
MX2RG | MX2SG

TRIM FINISH DETAILS (MX2RT only)

Trimless (MX2RTL)

Backer flange

Ceiling material

Mud, texture & paint

1/2″ max. trim flange coverage

Trim (MX2RTR)

Backer flange

Ceiling material

Texture & paint

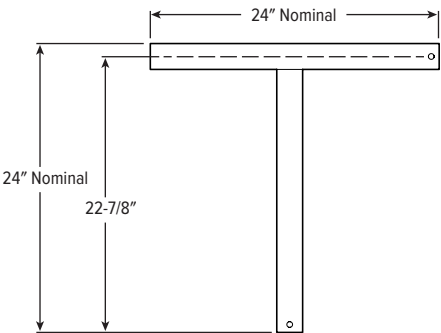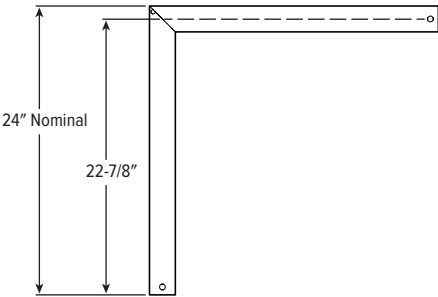7/16″ max. trim flange coverage
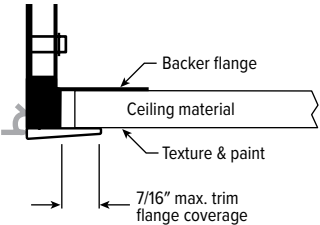
ROUGH-IN DIMENSIONS

- Framing allowance for width (stand-alone) is 3-1/2″ ± 1/4″.
- Framing allowance for length (All Types) is length plus 1-1/2″ minimum.
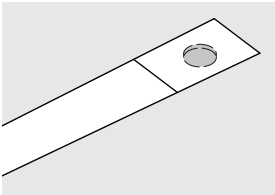
CORNER DETAILS

BACK VIEW

24″ Nominal

22-7/8″

24″ Nominal

22-7/8″

24″ Nominal

Note: Corner orientation determined in field. Feeder corner end cap shipped separately.

SENSOR & NODE PLACEMENT DETAILS

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2″ Continuous – Recessed

AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS

FEATURES

Simple
- Gateway-free distributed control
- Factory pre-commissioning
- Contractor friendly installation
- Occupancy/vacancy/daylight sensing

Scalable
- Virtually unlimited network size
- Spans small offices to large warehouses
- Flexible control strategies

Secure
- Optional cloud connectivity
- UL IoT platinum security rating
- DLC 5.0 compliant

COMMISSIONING & INSTALLATION TOOLS

Avi-on mobile apps provide intuitive, quick installation and commissioning. Pro tools are available to qualified installers. Live commissioning training and on-site or remote support by Avi-on must be ordered separately through Avi-on.
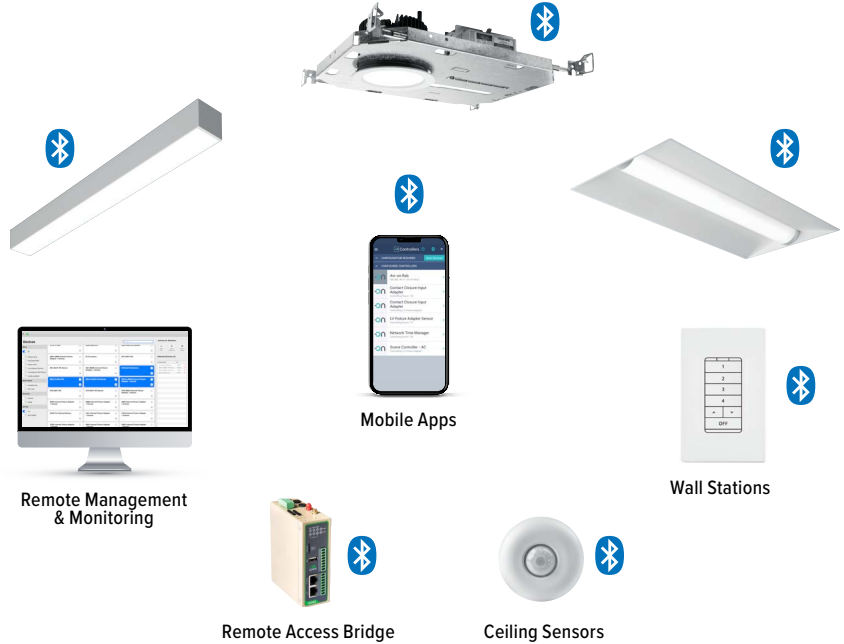
Commissioning Mobile App

Zone Scanner Web App

Commissioning Pro App

SYSTEM COMPONENTS

Mobile Apps

Remote Management & Monitoring

Wall Stations

Remote Access Bridge

Ceiling Sensors

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ACCESSORIES

WALL STATIONS	
AVI-2401AC	Scene controller - numbered 1-4, 120-277VAC
AVI-2402BAT	Scene controller - numbered 1-4, battery powered
AVI-2401AC-2	Dimmer with presets - percentages, 120-277VAC
AVI-2402BAT-2	Dimmer with presets - percentages, battery powered
AVI-2401AC-3	On/off/dimming, 120-277VAC
AVI-2402BAT-3	On/off/dimming, battery powered

NETWORK	
AVI-RAB-LTE	Remote access bridge
AVI-KIT-NTM	Network time manager with battery backup

CEILING MOUNT SENSORS	
AVI-KIT-SEN-DUCM	PIR motion and ultrasonic sensor kit
AVI-KIT-SEN-ICM	PIR motion and photocell sensor kit

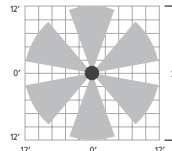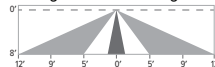For load controllers and additional accessory info, see hew.com/avi-on

AVI-LVFA-CS2-PIR Avi-on wireless fixture control with PIR motion and daylight sensor. DA Driver only.

SPECIFICATIONS	
TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8′ – 10′
DETECTION ANGLE	360°
TEMPERATURE RANGE	-30° to 50°C
RELATIVE HUMIDITY	10 to 80% non-condensing
IP RATING	IP20
MANUFACTURER	Avi-On

Bluetooth® Lighting Controls

SENSOR COVERAGE PATTERNS
Side View
8′ height: ø24′ coverage

SENSOR DETAIL

Dimensions: 13/16″ x 2-1/4″

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ADDITIONAL CONTROL OPTIONS

AWNS Lutron Athena wireless node integral fixture control, RF with daylight and occupancy sensing. DA and DSR Drivers only.

SPECIFICATIONS

TYPE	Radio Frequency
MOUNTING HEIGHT	8′ – 12′
DETECTION ANGLE	360°
TEMPERATURE RANGE	0° to 55℃
RELATIVE HUMIDITY	0 to 90%, non-condensing
COMMISSIONING	Clear Connect gateway – Type X with app (iOS or Android)
MANUFACTURER	Lutron
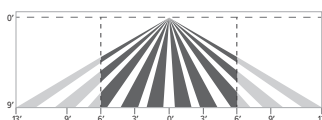
SENSOR COVERAGE PATTERNS

9′ height: ø12′ coverage

Motion Sensor Coverage

CEILING HEIGHT	COVERAGE AREA (SQ FT)
8′	114
9′	144
10′	178
12′	256

SENSOR DETAIL

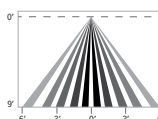Dimensions: ø1-1/8″

ATHENA CONTROL OPTIONS

CATALOG NUMBER	DESCRIPTION
AWNR	Lutron Athena wireless node integral fixture control, RF only, for use with D4i DALI-2 or driver with 12V auxiliary power
AWNS	Lutron Athena wireless node integral fixture control, RF with daylight and occupancy sensing, for use with D4i DALI-2 or driver with 12V auxiliary power
AWNR-BL	Lutron Athena wireless node integral fixture control, RF only, for use with D4i DALI-2 or driver with 12V auxiliary power, black finish
AWNS-BL	Lutron Athena wireless node integral fixture control, RF with daylight and occupancy sensing, for use with D4i DALI-2 or driver with 12V auxiliary power, black finish

VDO Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC). DSR or LDE Drivers only. LDE drivers require driver interface

SPECIFICATIONS

TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8′ – 12′
DETECTION ANGLE	360°
TEMPERATURE RANGE	0° to 55℃
RELATIVE HUMIDITY	0 to 90%, non-condensing
COMMISSIONING	App (iOS or Android)
MANUFACTURER	Lutron

SENSOR COVERAGE PATTERNS

9′ height: ø12′ coverage

Motion Sensor Coverage

CEILING HEIGHT	COVERAGE AREA (SQ FT)
8′	114
9′	144
10′	178
12′	256

SENSOR DETAIL

Dimensions: 2-11/16″ x 1″

VIVE CONTROL OPTIONS

CATALOG NUMBER	DESCRIPTION
VRF	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), for use with sensor-ready driver
VDO	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC), for use with sensor-ready driver
VRF/DBI	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and digital link interface, for use with Lutron Hi-lume 1% EcoSystem dimming LED driver
VDO/DBI	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC) and digital link interface, for use with Lutron Hi-lume 1% EcoSystem dimming LED driver

OCCWS-FS-305-L6-PP-120/277 Wattstopper PIR motion and daylight hold off sensor with power pack, 120/277V
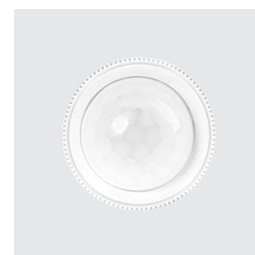
SPECIFICATIONS

TYPE	PIR Motion + Daylight Hold Off
MOUNTING HEIGHT	8′
LENS	Indoor, non-wet location use
DETECTION ANGLE	360°
TEMPERATURE RANGE	-40° to 55℃
RELATIVE HUMIDITY	5% to 95%, non-condensing
COMMISSIONING	Dials under lens

SENSOR COVERAGE PATTERNS

8′ height: ø20′ coverage
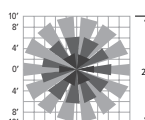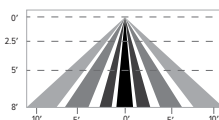
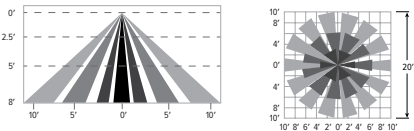### SENSOR DETAIL

Dimensions: ø1-5/16″

MX2R LED
2" Continuous – Recessed

OCCWS-LMFS-601-PP-120/277 Wattstopper PIR motion and daylight sensor with power pack, 120/277V

SPECIFICATIONS

TYPE	PIR Motion + Daylight
MOUNTING HEIGHT	8' – 12'
LENS	Up to 300 sq/ft coverage
DETECTION ANGLE	360°
TEMPERATURE RANGE	0° to 50°C
RELATIVE HUMIDITY	0 to 90%, non-condensing
COMMISSIONING	App (iOS or Android)

SENSOR COVERAGE PATTERNS

8' height: ø20' coverage

SENSOR DETAIL

Dimensions: ø1-5/16"

ADDITIONAL DRIVER OPTIONS

Note: Lumen restrictions apply, consult product builder at hew.com/product-builder.

CATALOG NUMBER	DESCRIPTION
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible, 120V only)
DIM TRC	Line voltage dimming driver (TRIAC compatible, 120V only)
DA	Driver with 12V auxiliary power
DSR	Sensor-ready driver (D4i DALI-2)
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver

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