

## 2.3" MAGIC SUSPENDED LINEAR LIGHT

### Direct and Indirect Light



This Magic LED linear fixture is a 2.3" wide linear architectural luminaire with a slim and discreet profile. The Magic available in standard lengths of 2', 3', 4', and 8', and can be joined together in seamless runs of desired length. The Magic is an affordable indirect/direct linear LED luminaire. Various optical design delivers uniform, continuous lines of light. Different pattern joiners available for unlimited lighting pattern design.

### TECHNICAL DATA

|                     |                                                                                                                     |
|---------------------|---------------------------------------------------------------------------------------------------------------------|
| Length              | 2ft, 3ft, 4ft, 8ft                                                                                                  |
| CRI                 | 80                                                                                                                  |
| CCT                 | 3000K, 3500K, 4000K                                                                                                 |
| Dimming             | 1-10V Dimming                                                                                                       |
| Compatible Dimmer   | LUTRON: DVSTV<br>LEVITON: IP710                                                                                     |
| Input Voltage       | 120-277V, 50/60Hz                                                                                                   |
| Operating Temp.     | -4°F to 104°F (-20°C to 40°C)                                                                                       |
| Certifications      | cULus conforms to UL Std. 1598<br>Cert. to CSA Std. C22.2 No.250.0<br>Suitable for damp locations<br>RoHS compliant |
| Power Factor        | >0.9 at full load                                                                                                   |
| Harmonic Distortion | <20% at full load                                                                                                   |
| Projected Lifetime  | L70-100,000 Hours                                                                                                   |

### FEATURES

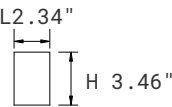
- Comes in lengths of 2', 3', 4', and 8'.
- Direct and indirect.
- Available with several lit joiner accessories for unlimited lighting pattern design.
- Professional lenses available in flush diffused, louver, micro reflector and regress lens.
- Microwave sensor and EBU are available.

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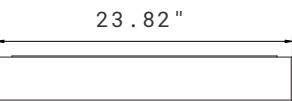
Direct and Indirect Light

## SPECIFICATION

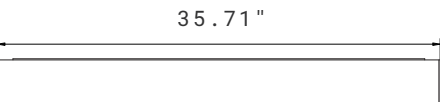
### Side View



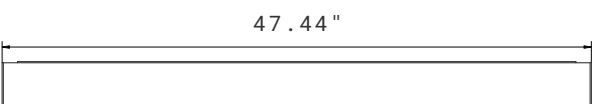
2ft



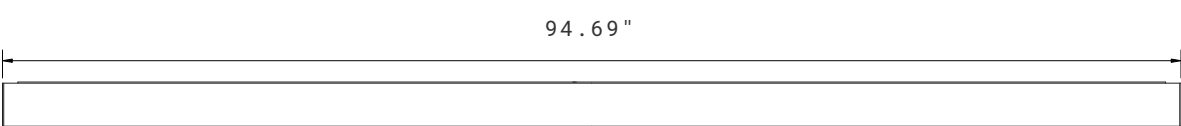
3ft



4ft



8ft



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### ORDERING INFORMATION

EXAMPLE: MAG1223-SW1-PSM-SD-FDL

| MAG          |                                                                                                                                            |                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                         |                      |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 1. Series    | 2. Length                                                                                                                                  | 3. Width                                                                                                                                                                                                  | 4. Driver                                                                                                                                                                                                                                                           | 5. CCT                                                                                                                                                                                                  | 6. Voltage           |
| MAG<br>Magic | <b>06</b><br>2ft<br><b>09</b><br>3ft<br><b>12</b><br>4ft<br><b>24</b><br>8ft<br><b>Option<sup>1</sup></b><br>Desired System Length         | <b>23</b><br>2.3 Inch                                                                                                                                                                                     | <b>BLANK</b><br>Integral                                                                                                                                                                                                                                            | <i>Selectable CCT</i><br><b>SW<sup>2</sup></b><br>Selectable<br>3000K<br>3500K<br>4000K <sup>2</sup><br><i>Single CCT<sup>3</sup></i><br><b>30</b><br>3000K<br><b>35</b><br>3500K<br><b>40</b><br>4000K | <b>1</b><br>120-277V |
|              | 7. Mounting Options                                                                                                                        | 8. Light Distribution                                                                                                                                                                                     | 9. Lens Options                                                                                                                                                                                                                                                     | 10. Finish                                                                                                                                                                                              |                      |
|              | <b>PSM</b><br>Suspended and surface mounted<br><br><i>Please refer to the following accessory table to choose the right mounting kits.</i> | <b>SD</b><br>Following options available by dip switch<br>100% Uplight<br>10% down, 90% up<br>30% down, 70% up<br>50% down, 50% up<br>70% down, 30% up<br>90% down, 10% up<br>100% Downlight <sup>4</sup> | <b>FDL</b><br>Flush Diffused Lens<br><b>RGL<sup>6</sup></b><br>Regressed Lens<br><b>LVL<sup>6</sup></b><br>Louver Lens<br><b>MRF<sup>5&amp;6</sup></b><br>Micro Reflector<br><br><i>If the joined length exceeds 8ft, only continous Roll-Out Lens can be used.</i> | <b>BLANK</b><br>White<br><b>BK</b><br>Black                                                                                                                                                             |                      |

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#### NOTE:

1. Individual fixtures, Runs and Configurations are supplied in nominal lengths to ensure full, even, illumination. If desired runs and configurations are needed, please tell us the details in advance. Then we can prepare the middle run and end run in factory for easy installation, or end user need to modify the standard individual fixtures into middle run and end run.
2. 4000K is default setting.
3. Single CCT is only for Micro Reflector.
4. Default setting is 100% downlight.
5. MRF is only available in 4ft and single CCT.
6. RGL, LVL and MRF lens will ask long lead time for 2ft, 3ft and 8ft. Please check with Customer Service in advance.

## ACCESSORIES (ORDERED SEPARATELY AND FIELD INSTALLED)



*Drop Ceiling Suspension Mount List.*

#### **MAG-PMK3-5FT<sup>1</sup>**

Aircraft Cable Pendant Mount Kits for Drop Ceiling, with 5ft aircraft cable and 5ft power cord ( One set per fixture).

#### **MAG-PMK3-12FT<sup>1</sup>**

Aircraft Cable Pendant Mount Kits for Drop Ceiling, with 12ft aircraft cable and 12ft power cord ( One set per fixture).

#### NOTE:

1. Suitable for 9/16" and 15/16" Flat Ceiling.  
If for 9/16" slot ceiling please contact Customer Service.



*Dry Ceiling Suspension Mount List.*

#### **MAG-PMK1-5FT**

Aircraft Cable Pendant Mount Kits for Dry Ceiling, with 5ft aircraft cable and 5ft power cord ( One set per fixture).

#### **MAG-PMK1-12FT**

Aircraft Cable Pendant Mount Kits for Dry Ceiling, with 12ft aircraft cable and 12ft power cord ( One set per fixture).

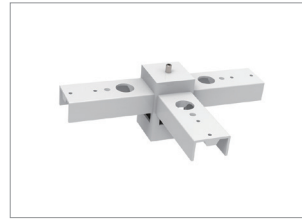
## ACCESSORIES (ORDERED SEPARATELY AND FIELD INSTALLED)



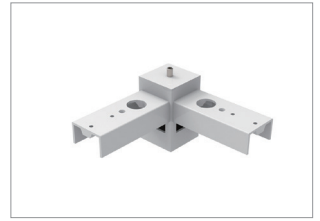
**MAG23-LINE**  
Line Shape Joiner.



**MAG23-CROSS**  
Cross Shape Joiner, white.



**MAG23-T**  
T Shape Joiner, white.



**MAG23-L**  
90° L Shape Joiner, white.



**MAG23-Y**  
Y Shape Joiner, white.



**MAG23-Z**  
Z Shape Joiner, white.



**MAG23-Hex Hub**  
120° Hex-hub Joiner,  
white.



**MAG23-CURVE-LIT**  
90° Curve Joiner with  
light, white.

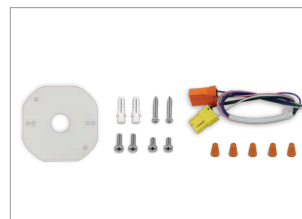
**MAG23-CURVE**  
90° Curve Joiner without  
light, white.



**MAG-MSW-PM/SM¹**  
Microwave Motion Sensor  
Kit for Pendant Mounting.



**RC-100**  
Remote Control for  
Microwave Motion Sensor.



**MAG-SMK**  
Surface Mount Kits.



**ACGP**  
Aircraft Cable Gripper  
(a pair). Suitable for  
Φ0.06"-0.08"(1.5mm-2  
mm) aircraft cable  
including two pieces.

### ACCESSORIES (ORDERED SEPARATELY AND FIELD INSTALLED)



**EBU-H08170<sup>2</sup>**  
8W Emergency Battery  
Back-up for MAX.60W fixture.



**MAG23-ROL<sup>3</sup>**  
Continuous Roll-Out  
Lens (42').

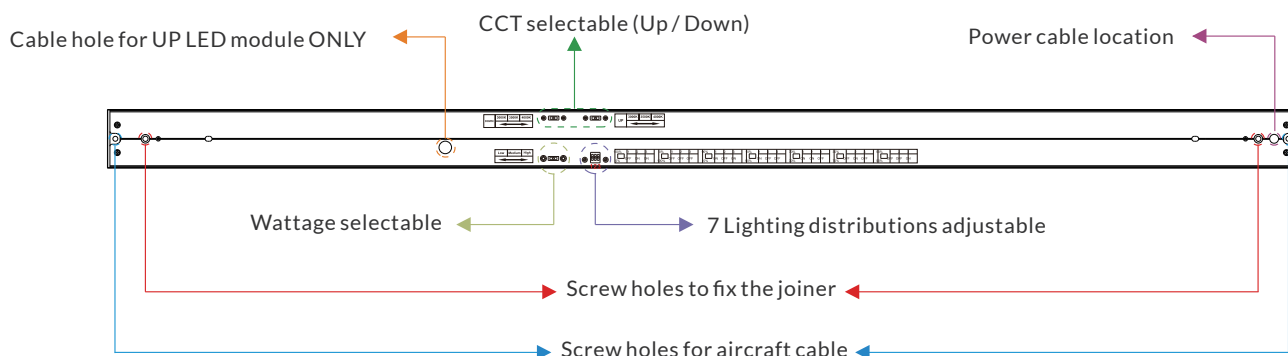
**EBU-H25170<sup>2</sup>**  
25W Emergency Battery  
Back-up for MAX.200W fixture.

**MAG23-SCL<sup>3</sup>**  
40' silicon lens.

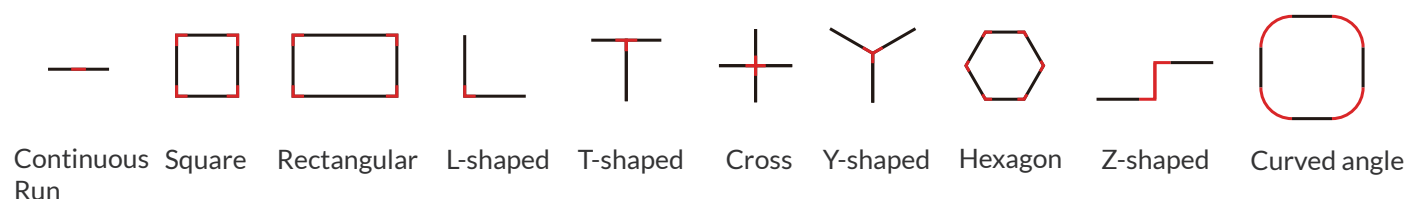
#### NOTE:

1. Microwave dimming sensor, for mounting height 20ft (6m) max. Dimming default setting is Bi-Level dim and dimming to 50%. Besides, daylight sensor default setting is disable. If need other dimming levels such as 10% or 30%, ON/OFF function and daylight sensor function, please consult with customer service in advance.
2. Emergency battery back-up is for ambient temperatures of 32°F to 95°F (0 °C to 35°C).
3. If the straight joined length exceeds 8ft, please choose continous Roll-Out Lens. If curve joniner is used, silicon lens must be used too.

### MOUNTING LOCATION



### CONFIGURED SHAPES

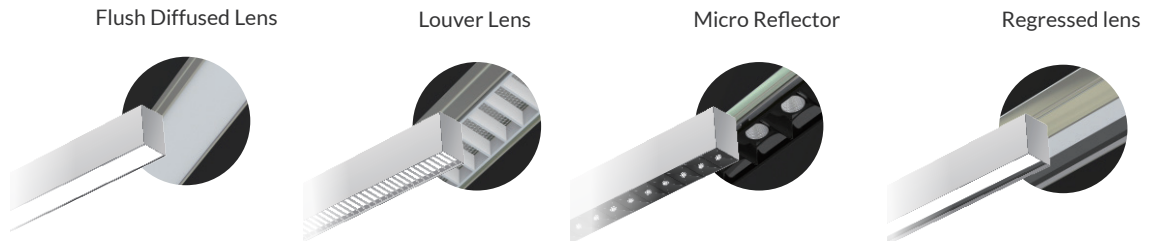


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### PERFORMANCE DATA

Lumen values are measured by third party certified laboratories performed in accordance with IESNA LM-79-08 as well as Lighting Facts listed.



| Lengths                   | 2FT/3FT/4FT/8FT                                                                                      | 2FT/3FT/4FT/8FT                                                                                      | 4FT                                                                                                  | 2FT/3FT/4FT/8FT                                                                                      |
|---------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Width                     | 2.3"                                                                                                 | 2.3"                                                                                                 | 2.3"                                                                                                 | 2.3"                                                                                                 |
| Wattage                   | 10W/15W/20W selectable<br>15W/20W/30W selectable<br>20W/30W/40W selectable<br>40W/60W/80W selectable | 10W/15W/20W selectable<br>15W/20W/30W selectable<br>20W/30W/40W selectable<br>40W/60W/80W selectable | 10W/15W/20W selectable<br>15W/20W/30W selectable<br>20W/30W/40W selectable<br>40W/60W/80W selectable | 10W/15W/20W selectable<br>15W/20W/30W selectable<br>20W/30W/40W selectable<br>40W/60W/80W selectable |
| Voltage                   | 120-277V (Int.Driver)                                                                                | 120-277V (Int.Driver)                                                                                | 120-277V (Int.Driver)                                                                                | 120-277V (Int.Driver)                                                                                |
| Lumen Output Low level    | 575lm/ft, 5W/ft                                                                                      | 450lm/ft, 5W/ft                                                                                      | 575lm/ft, 5W/ft                                                                                      | 450lm/ft, 5W/ft                                                                                      |
| Lumen Output Medium level | 860lm/ft, 7.5W/ft                                                                                    | 675lm/ft, 7.5W/ft                                                                                    | 860lm/ft, 7.5W/ft                                                                                    | 710lm/ft, 7.5W/ft                                                                                    |
| Lumen Output High level   | 1150lm/ft, 10W/ft                                                                                    | 900lm/ft, 10W/ft                                                                                     | 1150lm/ft, 10W/ft                                                                                    | 950lm/ft, 10W/ft                                                                                     |
| Installation              | Suspended                                                                                            |                                                                                                      |                                                                                                      |                                                                                                      |
| Controls (optional)       | Emergency Battery Back-up / Motion Sensor                                                            |                                                                                                      |                                                                                                      |                                                                                                      |

### NOTE

- Notes: Above are subject to 3500K with 50% up and 50% down lighting distribution. All efficacy is  $\pm 5\%$  base on different CCT and lighting distributions. If silicon lens are used the efficacy will decreased by 10%. Check the IES file to gain the accurate data.
- For 3000K fixtures, use 0.96 multiplier; For 4000K fixtures, use 1.04 multiplier.

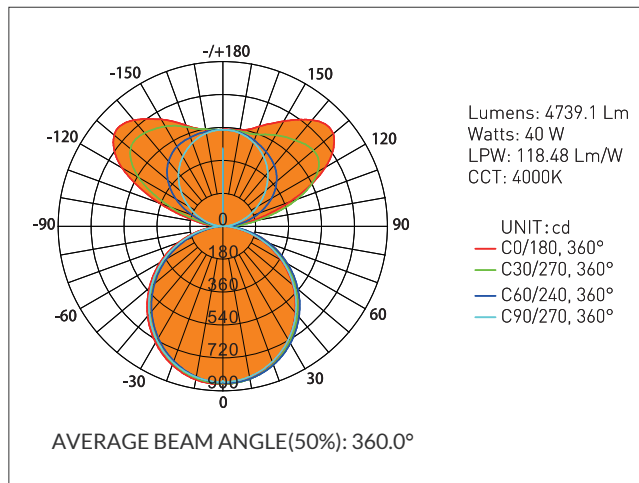
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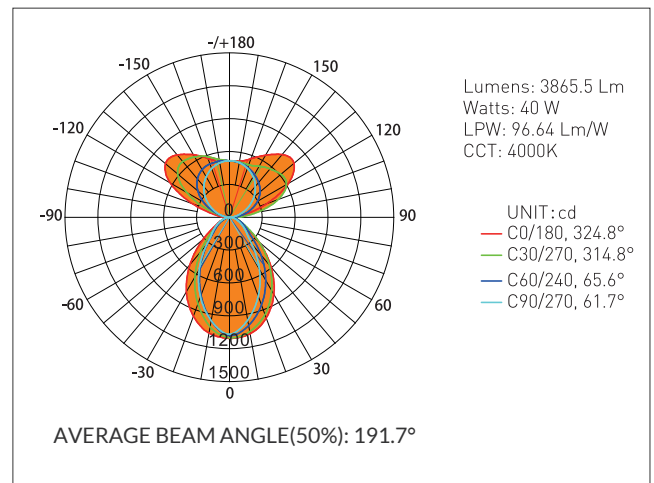
## PHOTOMETRY

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP certified laboratory. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%. Results may vary per actual order.

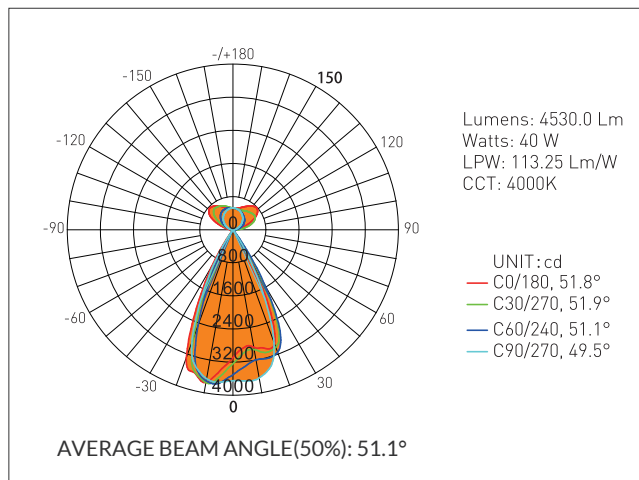
### 4ft/ Diffuser/50% Up, 50% Down/ 4000K



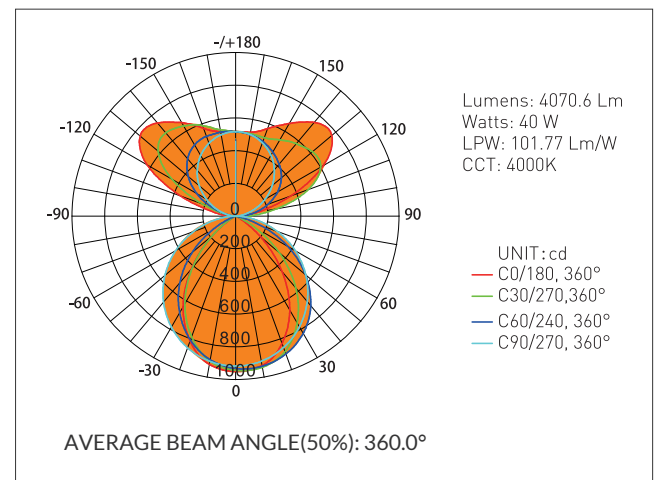
### 4ft/ Louver/50% Up, 50% Down/ 4000K



### 4ft/ Micro Reflector/50% Up, 50% Down/ 4000K



### 4ft/ Deep Regressed/50% Up, 50% Down/ 4000K



## NOTE:

1. These distribution diagram is tested based on suspended mount.

### MICROWAVE DIMMING SENSOR

#### 3-Step Dimming Function

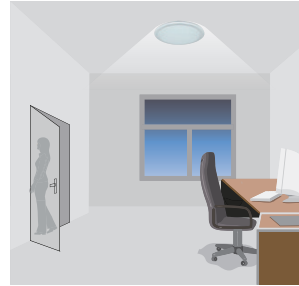
The sensor is an innovative motion sensor, switch on the light on detection of movement, and switch off after a hold time when there is no motion detected.



1. No motion detected, all lamps switch off.



2. Any movement is detected from any direction, all lamps synchronously switch on.



3. No motion is detected in detection area, all lamps synchronously dim to a low light level after hold time.



4. After stand-by period, the lamps switch off if no movement is detected in the detection zone.

### MICROWAVE DIMMING SENSOR SETTING (120-277V)

By selecting the combination on the DIP switch, sensor data can be precisely set for each specific application.

The sensor setting also can be done by a remote control (RC-100) which need to be bought separately.

|     | 1 | 2 |      |
|-----|---|---|------|
| I   | ↓ | ↓ | 20%  |
| II  | ↓ | ↑ | 50%  |
| III | ↑ | ↓ | 75%  |
| IV  | ↑ | ↑ | 100% |

#### Sensitivity

Sensitivity can be reduced by selecting the combination on the DIP switches to fit precisely each application.

**Default Setting: 100%**

|     | 3 | 4 |        |
|-----|---|---|--------|
| I   | ↓ | ↓ | 10s    |
| II  | ↓ | ↑ | 1min   |
| III | ↑ | ↓ | 5mins  |
| IV  | ↑ | ↑ | 15mins |

#### Hold time

Refers to the time period the lamp remains at 100% illumination after no motion detected.

**Default Setting: 15mins**

|     | 5 | 6 |        |
|-----|---|---|--------|
| I   | ↓ | ↓ | ☀      |
| II  | ↓ | ↑ | 10 lux |
| III | ↑ | ↓ | 30 lux |
| IV  | ↑ | ↑ | 50 lux |

#### Daylight sensor

The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold.

**Default Setting: ☀ (Disable)**

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|     | 7 | 8 |     |
|-----|---|---|-----|
| I   | ↓ | ↓ | 0%  |
| II  | ↓ | ↑ | 10% |
| III | ↑ | ↓ | 30% |
| IV  | ↑ | ↑ | 50% |

#### Stand-by dimming level

The low light level you would like to have after the hold time in the long absence of people.

Default Setting: 50%

|     | 9 | 10 |        |
|-----|---|----|--------|
| I   | ↓ | ↓  | +∞     |
| II  | ↓ | ↑  | 1min   |
| III | ↑ | ↓  | 30mins |
| IV  | ↑ | ↑  | 60mins |

#### Stand-by time

Refers to the time period the lamp remains at a low light level before it completely switches off in the long absence of people. When set to “ +∞ ” mode, the low light is maintained until motion is detected.

Default Setting: 30mins

## WARRANTY

5 years limited warranty.

Specifications subject to change without notice.