

## SM LED



## APPLICATION

Specification grade fixture designed for high performance and maximum efficiency. It can be installed in rows either surface or stem mounted to provide excellent, energy efficient general lighting in commercial, retail and institutional environments.

## FEATURES:

- Die formed, cold-rolled, heavy gauge steel housing construction provides durability and strength.
- 100% acrylic, clear prismatic pattern #12 lens with nominal 0.100" thickness. Steel door frame allows easy lens replacement without tool.
- Unique door frame design delivers a premium extrude appearance.
- Door latches and hinges from either side.
- Standard door is without gasket flush steel with sturdy tee hinges and opposing, rotary action cam latches. Also available fully gasket door.
- Smooth edges for easy handling.
- Finish is high-gloss baked white enamel over rust inhibiting phosphate coating for maximum corrosion resistance.
- Paint after fabrication.

## MOUNTING:

- Pendant or surface mounting.
- End to end row mounting or single unit installation for both surface and stem mounting.
- 1'x4' fixture requires at least 2 stems for stem mounting. 2'x2', 2'x4' fixtures require at least 4 stems for stem mounting.
- Compatible with most ceiling types.

## LED:

- High quality array LEDs.
- LM80
- Color Temperature: 2700/3000/3500/4000/5000 (K)
- Color Rendering Index: > 80 Ra.
- Calculated L70: 122,000 hours
- Reported L70: +60,000 hours

## ELECTRICAL:

- High power factor electronic driver, operate from a 120 ~ 277 Vac input range, 50 / 60 Hz.
- Features included over voltage protection, surge, short circuit protection and over load protection.
- Power Factor: typical > 0.95, THD <20, meets Class1 or Class 2 circuit.
- Generic : 0-10V 10% dim. (GR)
- Operating temperature: -4°F (-20°C) ~ 122°F (50°C).
- <ELCU-200>
- Guarantees emergency lighting remains ON or is turned on when power to the control device is lost.
- Interfaces with fire alarm panel or security system.
- "Watchdog" feature allows emergency loads to be controlled in tandem with normal power loads.
- UL listed for use in emergency circuits.

## LISTING:

- UL/CUL listed and labeled.
- Listed to UL 1598 and UL 8750.
- Suitable for dry and damp locations.
- CEC Compliant EM (please contact for more information)
- ARRA compliant (optional).
- BAA compliant (optional).
- Trade Agreements Act compliant (optional).
- 7 or 10 years limited warranty. (optional) 4
- 5 years limited warranty.
- Bluetooth Mesh System available, please contact factory for more information.

## CONFIGURATIONS

| Series | Size    | LED    | AC Input | Lumen Output (4000K) | Lumen Efficiency (4000K) |
|--------|---------|--------|----------|----------------------|--------------------------|
| SM LED | 1' x 4' | 36LED  | 39.33W   | 4361.57 lm           | 110.90 lm/W              |
|        |         | 44LED  | 46.71W   | 5584.36 lm           | 119.55 lm/W              |
|        |         | 54LED  | 57.33W   | 6404.25 lm           | 111.71 lm/W              |
|        |         | 72LED  | 78.66W   | 9339.55 lm           | 118.73 lm/W              |
|        |         | 108LED | 114.66W  | 13713.58 lm          | 119.60 lm/W              |
|        | 2' x 2' | 27LED  | 29.76W   | 3598.15 lm           | 121.27 lm/W              |
|        |         | 36LED  | 39.22W   | 4536.36 lm           | 115.66 lm/W              |
|        |         | 44LED  | 46.84W   | 5384.59 lm           | 114.96 lm/W              |
|        |         | 54LED  | 57.49W   | 6608.91 lm           | 114.96 lm/W              |
|        |         | 72LED  | 78.44W   | 9072.71 lm           | 115.66 lm/W              |
|        | 2' x 4' | 108LED | 114.98W  | 13216.80 lm          | 114.95 lm/W              |
|        |         | 36LED  | 39.58W   | 4850.41 lm           | 122.55 lm/W              |
|        |         | 44LED  | 47.08W   | 5798.86 lm           | 123.17 lm/W              |
|        |         | 54LED  | 57.79W   | 7134.53 lm           | 123.46 lm/W              |
|        |         | 72LED  | 75.50W   | 9238.20 lm           | 122.36 lm/W              |
|        |         | 108LED | 108.0W   | 13088.52 lm          | 121.19 lm/W              |

| CCT | Multiplier |        |        |
|-----|------------|--------|--------|
|     | 3000K      | 3500K  | 5000K  |
| 1X4 | 0.9502     | 0.9837 | 1.0173 |
| 2X2 | 0.9891     | 0.9951 | 1.0119 |
| 2X4 | 0.9809     | 0.9980 | 1.0030 |

## OUTPUT CURRENT

|       |       | Bi-Level     |         | Tri-Level (Default) |         |
|-------|-------|--------------|---------|---------------------|---------|
| SW1   | SW2   | Config Range | Default | Config Range        | Default |
| Close | Open  | 10% - 70%    | 40%     | 10% - 70%           | 30%     |
| Open  | Close | 10% - 70%    | 40%     | 10% - 70%           | 70%     |
| Close | Close | 100%         | 100%    | 100%                | 100%    |
| Open  | Open  | 0%           | 0%      | 0%                  | 0%      |

# LED SURFACE MOUNT TROFFER

## ORDERING INFORMATION

EXAMPLE: SM-24-36LED-40K-UNV-AB

| MODEL | SIZE           | LED                           | COLOR TEMP.                                                   | EFFICACY                                                                                                                       | CRI                                              |
|-------|----------------|-------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| SM    | 14<br>22<br>24 | 1' x 4'<br>2' x 2'<br>2' x 4' | 27LED<br>36LED<br>44LED<br>54LED<br>72LED<br>108LED           | 27W LED<br>36W LED<br>44W LED<br>54W LED<br>72W LED<br>108WLED                                                                 | -27K<br>-30K<br>-35K<br>-40K<br>-50K             |
|       |                |                               | 2700K <sup>7</sup><br>3000K<br>3500K<br>4000K (Std.)<br>5000K | (Blank)<br>HE<br>Standard<br>High Efficacy  | (Blank)<br>C9<br>80+ CRI<br>90+ CRI <sup>8</sup> |

| TRIM TYPE |                             | FIXTURE FINISH                           | DIFFUSER |                                                          | VOLTAGE |                   |
|-----------|-----------------------------|------------------------------------------|----------|----------------------------------------------------------|---------|-------------------|
| (Blank)   | Flush Steel, White          | (Blank) White (Std.)                     | (Blank)  | Pattern #12 Acrylic Lens 0.100" Thick                    | UNV     | 120-277V (Std.)   |
| SB        | Flush Steel, Black          | *BK Black RAL #9011                      | A12125   | Pattern #12 Acrylic Lens 0.125 " Thick                   | 120     | 120V              |
| FB        | Flush Aluminum, Black       | *AMB Anti-Microbial Coating              | P12125   | Pattern #12 Polycarbonate Lens 0.125" Thick              | 277     | 277V              |
| FN        | Flush Aluminum, Natural     | (Matte Skye White)                       | A19      | Pattern #19 Acrylic Lens 0.156" Thick                    | 347     | 347V <sup>2</sup> |
| FW        | Flush Aluminum, White       |                                          | P1       | 5/8"x5/8"x7/16" Deep Specular Plastic Louver             | 480     | 480V <sup>2</sup> |
| RB        | Regressed Aluminum, Black   | * Non-standard finish with extra charge. | P3       | 3/4"x3/4"x1/2" Deep Specular Plastic Louver <sup>3</sup> |         |                   |
| RN        | Regressed Aluminum, Natural |                                          | WA8      | Lumieo white Acrylic 0.080" Thick                        |         |                   |
| RW        | Regressed Aluminum, White   |                                          | FR       | Frosted Acrylic Lens, Pattern#12, 0.100" Thick           |         |                   |
|           |                             |                                          | FR12     | Frosted Acrylic Lens, Pattern#12, 0.125" Thick           |         |                   |
|           |                             |                                          | P50L     | 3/4"x3/4"x3/8" Deep Specular Plastic Louver with overlay |         |                   |

| LED DRIVER <sup>6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | OPTIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GR Generic, 0-10V 10% dim (Std.)<br>DM1 Generic 0-10V 1% dim<br>SD40 40%/100% Bi-Level Step dim<br>SDXX XX% / 100% Bi-Level Step dim (Specify XX : 10% ~ 70%)<br>TDM Triac Dim. (120V only)<br>TD30/70 30% / 70% / 100% Tri-Level Step dim<br>TDXX/YY XX% / YY% / 100% Tri-Level Step dim (Specify XX, YY : 10% ~ 70%)<br>ES566 eldoLED SOLOdrive Natural Dimming to dark, 0-10V, 100% ~ 0.1% dim<br>EC eldoLED ECOdrive 0-10V natural dim to 1% (Hybrid HydraDrive)<br>LDE1 Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology, 100% ~ 1% dim<br>ELV ELV compatible (reverse-phase or trailing-edge), (120V only)<br>PHSR Philips Xitanium Sensor-Ready, Dali 5%~100% dim.<br>PHDL Philips Xitanium DALI driver, Dim to 5%<br>ED560 eldoLED LightShape DALI dim to dark, 0.1% ~ 100% | AB AB Switching<br>EMG8 8W EM Battery Backup (CEC Compliant EM) <sup>5,11</sup><br>EMG15 15W EM Battery Backup (CEC Compliant EM) <sup>5,11</sup><br>EMG20 20W EM Battery Backup (CEC Compliant EM) <sup>5,11</sup><br>EMG25 25W EM Battery Backup (CEC Compliant EM) <sup>5,11</sup><br>ELCU-200 Fail-to-on Emergency lighting, UL924 <sup>9</sup><br>GTD Bodine Generator Transfer Device<br>GTD10DIM Bodine Generator Transfer Device (0-10VDC Dimmer Override)<br>F1 Single fuse, must select 120/277/347V <sup>1</sup><br>F2 Double fuse, must select 208/240V <sup>1</sup><br>SSH Swivel Stem Hanger<br>DSH Double Stem Hanger<br>ADPMS Bluetooth Mesh Wireless Sensor. Occupancy/Daylight harvesting/0-10V Dimming <sup>13,14</sup><br>O7W Optional 7 Years Limited Warranty <sup>4</sup><br>O10W Optional 10 Years Limited Warranty <sup>4</sup><br>SLL Spring-Loaded Latches <sup>12</sup><br>HC403 Microwave bi-level Occupancy Sensor, adjustable via DIP switch <sup>15</sup> Assembled in USA<br>ARRA BAA(Buy American Act) compliant<br>TAA Trade Agreements Act compliant<br>X#AC240 240" AC cable with canopy for pendant mount (For #, please specify: 1 for 15/16" T-bar ceiling, 2 for hard ceiling, 3 for sloped hard ceiling, 4 for 9/16" T-bar ceiling, 5 for 9/16" screw slot ceiling) |
| BLT Bluetooth Mesh System (contact factory for more information)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| LIGHTING CONTROL SYSTEM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>LUTRON VIVE</p> <p><u>&lt;Lutron Vive System Enabled&gt;</u></p> <p> Click Here!</p> <p>SNS200C RS-IR</p> <p><u>&lt;EasySense&gt;</u></p> <p>EasySense Ceiling-mount occupancy sensing, daylight harvesting and task tuning in one device (Must be ordered with PHSR driver)<sup>10</sup></p> <p>IR dongle for EasySense control</p> <p>PPA102S</p> <p><u>&lt;Bluetooth&gt;</u></p> <p>Bluetooth Powerpack (Consult factory for installation location)</p> <p>CASAMBI</p> <p>Contact factory for CASAMBI READY options</p> |

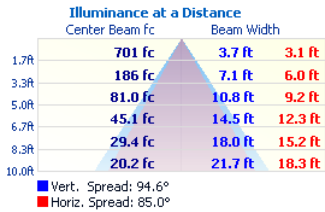
### NOTES:

- Must specify voltage.
- Supplied with step down transformer.
- Not available in 1'x4'
- his limited warranty covers electrical parts only and does not apply to labor, equipment lease, or defect from improper installation or operation. (EM battery backup does not included)
- Contact factory for other emergency ballast options.
- To find an approved dimmer switch, please see table 1.
- Available with C9 only.
- Lumen per watt is approximately 15% fewer than standard CRI (80+).
- Shipped separately.

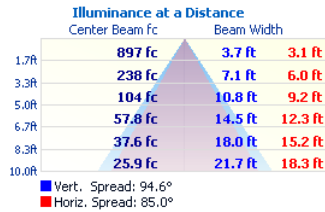
- Please see Compatible Phone list in the separate attachment. If not listed, order "RS-IR" and follow IR-Dongle user guide and NFC, and IR app user's manual. Android users only.
- Must specify voltage, not available with 347V or 480V.
- RB, RN, and RW door frames not available.
- Only available with standard 0-10V LED driver.
- Default setting from the factory is "occupancy enabled, Daylight disabled". To enable Daylight, disable occupancy and enable daylight adjustment must be made in the field prior to installation.
- See Table2 to find factory setting.

## SM LED

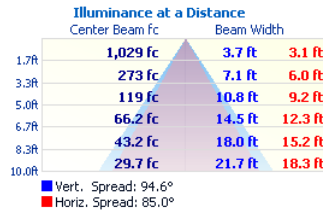
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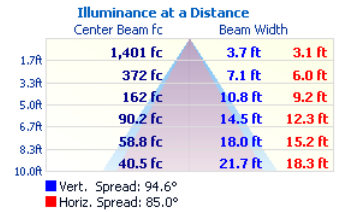
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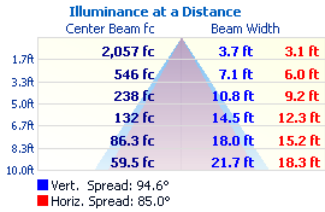
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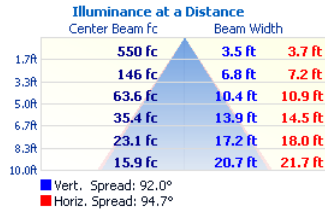
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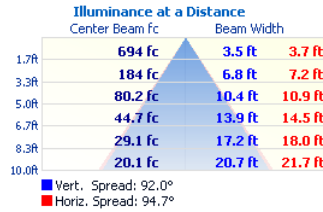
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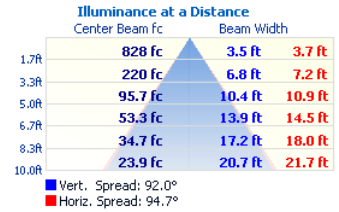
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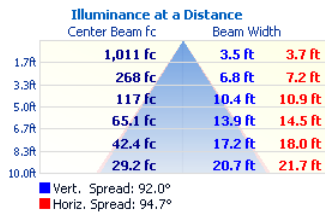
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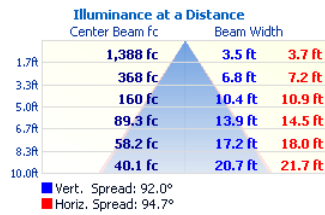
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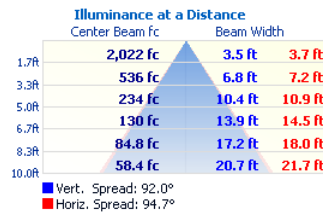
SM-22-2G-54LED



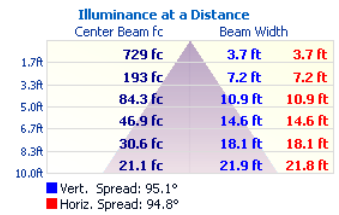
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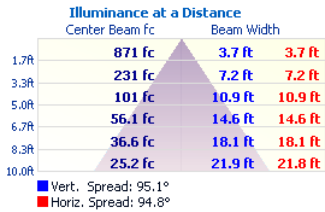
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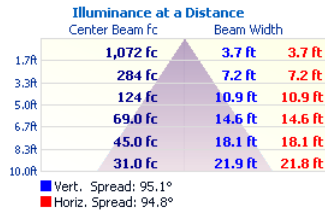
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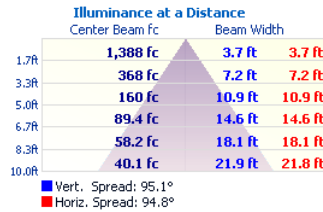
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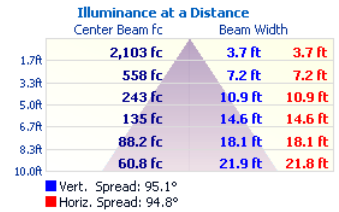
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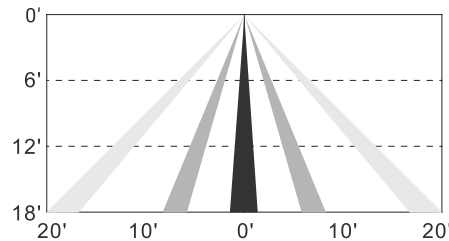
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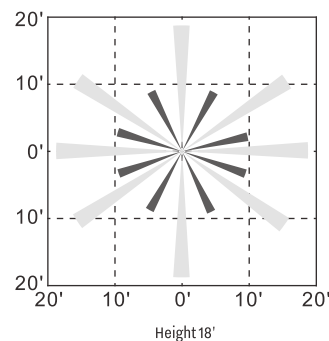
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SIDE VIEW

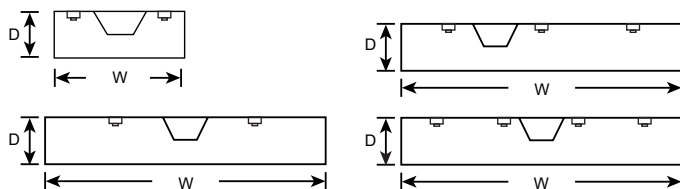


TOP VIEW



ADPMS coverage pattern

## SM LED

Specifications: 1'x4'

Length: 48 (1218)  
Width: 12 (304)  
Depth: 3-7/8 (99)  
Weight: 16.6 lbs (7.53 kg)

Specifications: 2'x2'

Length: 24 (608)  
Width: 24 (608)  
Depth: 3-7/8 (99)  
Weight: 16.16 lbs (7.33 kg)

Specifications: 2'x4'

Length: 48 (1218)  
Width: 24 (608)  
Depth: 3-7/8 (99)  
Weight: 26.3 lbs (11.93 kg)

All dimensions are in inches (millimeters).

COMPATIBLE DIMMER SWITCH (TABLE 1)

| Model # | Brand                       | Compatible Dimmer Switch |                                                                                                                                                                                                                                                                                                                               |
|---------|-----------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (Blank) | -                           | <Leviton>                | IlumaTech IP7 series                                                                                                                                                                                                                                                                                                          |
|         |                             | <Lutron>                 | Visit <a href="http://www.lutron.com/advance">www.lutron.com/advance</a> for a list of dimmers (Mark VII) that will work with this driver.                                                                                                                                                                                    |
|         |                             | <Philips>                | Sunrise : SR1200ZTUNV                                                                                                                                                                                                                                                                                                         |
| ES566   | eldoLED SOLOdrive           | <Busch-Jaeger>           | 2112U-101                                                                                                                                                                                                                                                                                                                     |
|         |                             | <Jung>                   | 240-10                                                                                                                                                                                                                                                                                                                        |
|         |                             | <Leviton>                | IlumaTech - IP710-DLX                                                                                                                                                                                                                                                                                                         |
|         |                             | <Lightoller Controls>    | ZP600FAM120                                                                                                                                                                                                                                                                                                                   |
|         |                             | <Merten>                 | 5729                                                                                                                                                                                                                                                                                                                          |
|         |                             | <Pass & Seymour>         | CD4FB-W                                                                                                                                                                                                                                                                                                                       |
|         |                             | <Wattstopper>            | DCLV1                                                                                                                                                                                                                                                                                                                         |
|         |                             | <Sensor Switch>          | nIO EZ                                                                                                                                                                                                                                                                                                                        |
|         |                             | <Synergy>                | ISD BC                                                                                                                                                                                                                                                                                                                        |
|         |                             | <ABB>                    | SD/S 2.16.1                                                                                                                                                                                                                                                                                                                   |
|         |                             | <Lutron>                 | Nova T: NTFTV<br>Diva - DVTv-xx, NFTV<br>GRAFIK Eye: GRX-TVI w GRX3503<br>Energy Savr Node: QSN-4T16-S<br>TVM2 Module                                                                                                                                                                                                         |
|         |                             | <Crestron>               | GLX-DIMFLV8, GLXP-DIMFLV8, GLPAC-DIMFLV4-*, GLPAC-DIMFLV8-*, GLPP-DIMFLVEX-PM, GLPP-1DIMFLV2EX-PM, GLPP-1DIMFLV3EX-PM, DIN-AO8, DIN-4DIMFLV4, CLS-EXP-DIMFLV, CLCI-1DIMFLV2EX                                                                                                                                                 |
| LDE1    | Lutron Hi-lume 1% EcoSystem | <Lutron>                 | PowPak Dimming Modules: RMJ-ECO32-DV-B, FCJ/FCJS-ECO <sup>1,2</sup><br>Energi Savr Node (120V only): QSN-1ECO-S, QSN-2ECO-S<br>GRAFIK Eye QS/Homeworks QS control unit (120V only): QSGRJ-_E(wireless) QSGR-_E<br>Quantum Hub (120V only): QP2-_2C/4C/6C/8C<br>Homeworks QS/myRoom Plus power module (120V only): LQSE-2ECO-D |
| TDM     | KEYSTONE                    | <Lutron>                 | Diva DV-600P, SkyLark S-600P, Ariadni AY-600P, Ariadni TG-603P, Maestro MA-600 (Digital), Diva CFL/LED DVCL-153P, Satin Colors DVSC-600P-SW                                                                                                                                                                                   |
|         |                             | <Leviton>                | 6641, IlumaTech IPI06-1LX, ToggleTouch TGI06-1LW (Digital)                                                                                                                                                                                                                                                                    |
| ELV     | KEYSTONE                    | <Lutron>                 | MAELV-600BL (Digital), DVELV-300P, SkyLark SELV-300P                                                                                                                                                                                                                                                                          |

## NOTES:

- All devices connected to one FCJ/FCJS-ECO will be controlled together. Devices will dim to the same level as the result of a control command. For more detail on adjusting low-end light level refer to Application Note#556 at [www.lutron.com](http://www.lutron.com).
- For the Line/Hot (L/H) terminal on the driver, it is preferred not to use the switched hot (red) wire from the control but rather the hot wire directly from the power source.

HC403 FACTORY SETTING (TABLE 2)

|                                     |         |
|-------------------------------------|---------|
| Detection Area                      | 100%    |
| Hold-time                           | 5 sec   |
| Daylight sensor                     | Disable |
| Stand-by period (tri-level control) | 10 sec  |
| Stand-by dimming level              | 10%     |

\* See a separate attachment to find more setting options.