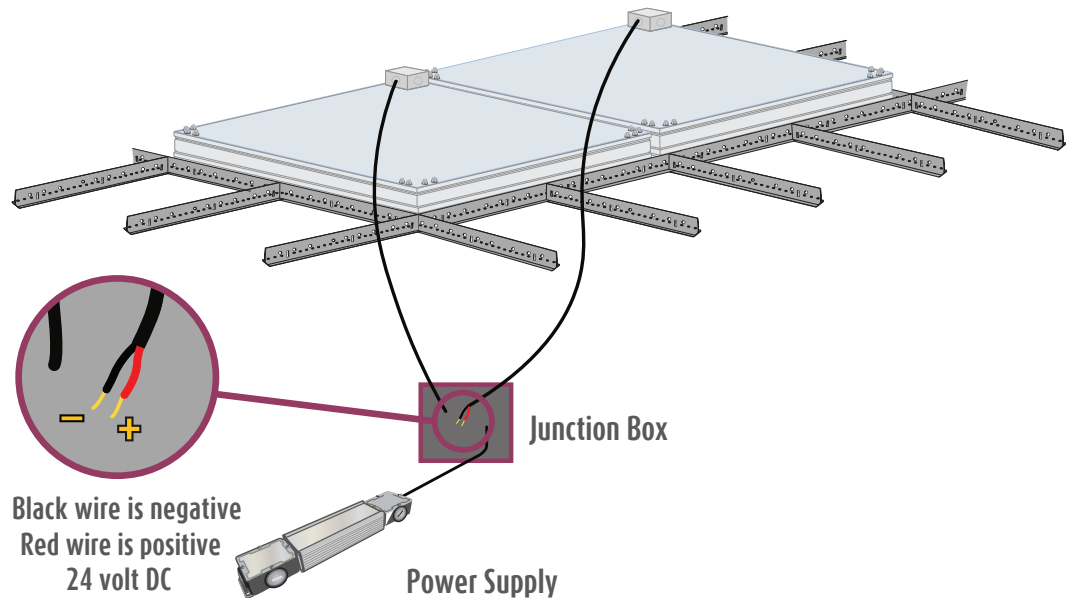


## Revelation w/ EcoSlim Electrical Instructions (Fixture Only)



### Installation Instructions includes:

Revelation w/ EcoSlim Electrical Instructions (Fixture Only)

Wiring Diagram EL001181

Total Wattage per Number of EcoSlim Fixtures

Wire Sizing Chart

Installation specific wiring diagram (where applicable)

For technical support at any time during the installation, please call us **toll free at 866-759-3228**.  
We want your installation to go as smoothly as possible. Thank you for choosing the Sky Factory.

## Revelation w/ EcoSlim Electrical Requirements:

ES26 Series = ES26, ES26M, ES26G

ES33 Series = ES33, ES33M, ES33G

ES34 Series = ES34, ES34M, ES34G

ES36 Series = ES36, ES36M, ES36G

ES44 Series = ES44, ES44M, ES44G

NOTE: For custom sizes, see installation specific wiring diagram (where applicable)

All EcoSlim fixtures are 24V DC only.

EcoSlim fixtures must be powered only by a UL Listed or CE Compliant 24V DC power supply with wattage greater than total wattage of EcoSlim fixtures.

Dry locations only.

For number of fixtures per power supply, see

“Total Wattage per Number of EcoSlim Fixtures” on page 6-8

For installations with one or more custom sizes, see

installation specific wiring diagram attached

For dimming requirements, see page 4.

RF filter, if used, is not provided by the Sky Factory.

*Electrical work must be performed by a qualified electrician who is familiar with DC lighting systems and must conform to all local and national codes.*

## Step 1: Wiring the Revelation fixtures to the power supply

See supporting drawing and charts on pages 5-9 and installation specific wiring diagram (where applicable)

| EcoSlim Lighting System - ES26 Series to ES44 Series |                                      |         |                      |                             |
|--|--------------------------------------|---------|----------------------|-----------------------------|
| TSF Model No.  | Light Box Dimensions and Weight Only |         | System Wattage (Max) | Input Current @ 24 Volts DC |
|  | WxLxH                                | Weight  |                      |                             |
| ES26   | 22.8125 x 70.8125 x 3.72 (inches)    | 27.6 lb | 57.1                 | 2.38A                       |
| ES33   | 34.8125 x 34.8125 x 3.72 (inches)    | 20.8 lb | 42.7                 | 1.78A                       |
| ES34   | 34.8125 x 46.8125 x 3.72 (inches)    | 27.6 lb | 52.6                 | 2.19A                       |
| ES36   | 34.8125 x 70.8125 x 3.72 (inches)    | 40 lb   | 65.5                 | 2.73A                       |
| ES44   | 46.8125 x 46.8125 x 3.72 (inches)    | 35.3 lb | 59                   | 2.46A                       |
|  |                                      |         |                      |                             |
| ES26M  | 57 x 177 x 9.54 (cm)                 | 12.6 kg | 57.1                 | 2.38A                       |
| ES33M  | 87 x 87 x 9.54 (cm)                  | 9.5 kg  | 42.7                 | 1.78A                       |
| ES34M  | 87 x 117 x 9.54 (cm)                 | 12.6 kg | 52.6                 | 2.19A                       |
| ES36M  | 87 x 177 x 9.54 (cm)                 | 18.1 kg | 65.5                 | 2.73A                       |
| ES44M  | 117 x 117 x 9.54 (cm)                | 16 kg   | 59                   | 2.46A                       |
|  |                                      |         |                      |                             |
| ES26G  | 59.5 x 184.5 x 9.54 (cm)             | 12.6 kg | 57.1                 | 2.38A                       |
| ES33G  | 90.8 x 90.8 x 9.54 (cm)              | 9.5 kg  | 42.7                 | 1.78A                       |
| ES34G  | 90.8 x 122 x 9.54 (cm)               | 12.6 kg | 52.6                 | 2.19A                       |
| ES36G  | 90.8 x 184.5 x 9.54 (cm)             | 18.1 kg | 65.5                 | 2.73A                       |
| ES44G  | 122 x 122 x 9.54 (cm)                | 16 kg   | 59                   | 2.46A                       |

NOTE: For custom sizes, see also installation specific wiring diagram



**Notice:** The LED fixtures are 24V DC ONLY.

AC voltage connected directly to the fixtures will destroy the lighting system.

## Step 1 continued

Fixtures are wired together in single or multiple circuits. Each circuit may be arranged in rows or clusters, depending on installation.

A junction box with 1/2" trade size knock-outs is attached on top corner of each fixture.

- Power leads inside fixture junction box are polarized, red (+) and black (-).
- Wire size 18 AWG stranded.

Wiring from fixtures to V DC side of client-provided power supply is polarized, positive (+) to positive (+) and negative (-) to negative (-):

Wire and additional junction boxes from the fixtures to the power supply provided by others.

Voltage drop will occur over long distances. For appropriate lengths and gauges, see  
Wire Sizing Chart.

Wire gauge must conform to local and national codes.

## Step 2: Dimming requirements

IMPORTANT: Use of Sky Factory approved dimming system only! Contact the Sky Factory if you plan on using a dimming system provided by others.



**Notice:** Dimming using non-approved systems may permanently damage LED's and will void the warranty!

In MRI applications, an RF Filter is required and is not provided by the Sky Factory.

## Step 3: Checking the polarity



**Notice:** CHECK THE POLARITY BEFORE TURNING ON POWER. MAKE SURE:

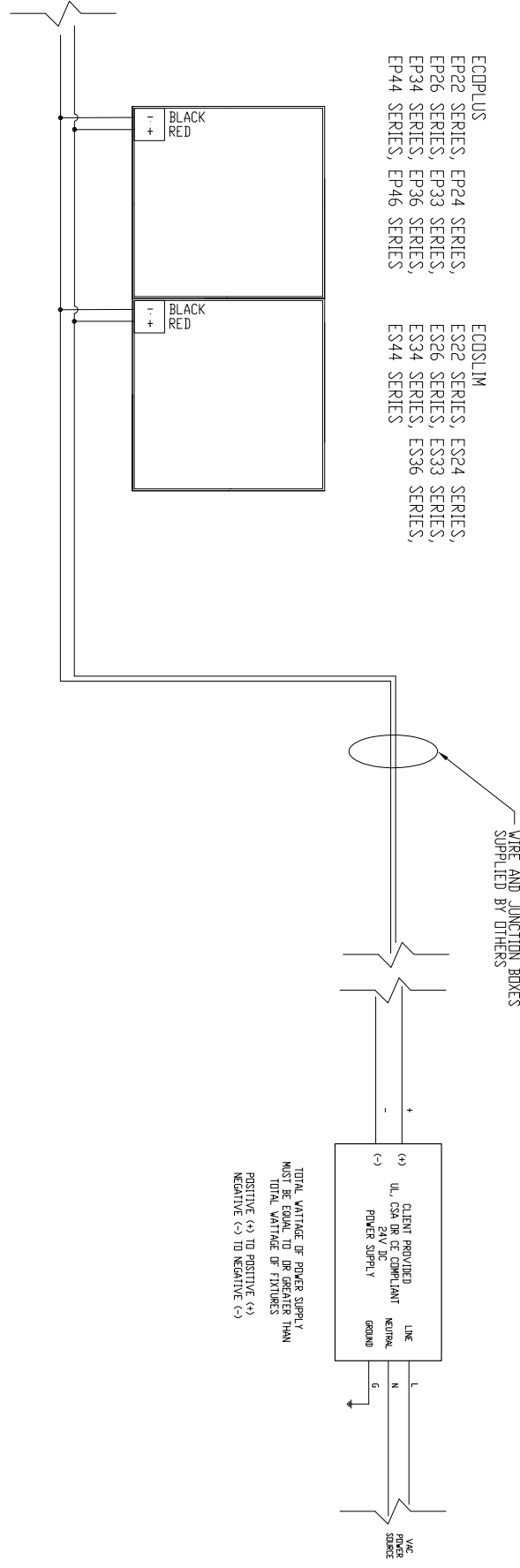
Red wires on the fixtures go to the "+" terminals of the power supply

Black wires on the fixtures go to the "-" terminals of the power supply

**IF THE SYSTEM IS WIRED BACKWARD, IT WILL DESTROY THE LED'S!**

EP AND ES SERIES FIXTURES  
WITH CLIENT PROVIDED POWER SUPPLY

- ECOPLUS**  
EP22 SERIES, EP24 SERIES,  
EP26 SERIES, EP33 SERIES,  
EP34 SERIES, EP36 SERIES,  
EP44 SERIES, EP46 SERIES
- ECOSLIM**  
ES22 SERIES, ES24 SERIES,  
ES26 SERIES, ES33 SERIES,  
ES34 SERIES, ES36 SERIES,  
ES44 SERIES



- NOTES:**
1. ALL FIXTURES 24V DC ONLY.
  2. JUNCTION BOX ATTACHED TO EACH FIXTURE:  
WIRE SIZE 18 AWG STRANDED  
WIRE COLORS:  
RED (+) (POSITIVE)  
BLACK (-) (NEGATIVE)
  3. SEE ALSO TOTAL WATTAGE PER NUMBER OF ECOSLIM FIXTURES  
CHART AND WIRE SIZING CHART.
  4. USE OF SKY FACTORY APPROVED DIMMING SYSTEM ONLY!  
CONTACT THE SKY FACTORY IF YOU PLAN ON USING A  
DIMMING SYSTEM PROVIDED BY OTHERS.
- NOTICE: DIMMING USING NON-APPROVED SYSTEMS  
MAY PERMANENTLY DAMAGE LEDS AND WILL  
VOID THE WARRANTY!**

|   |   |
|---|---|
|   |   |
| PROJECT NO. 1001181<br>DATE: 12/20/2018<br>DRAWN BY: [Name]<br>CHECKED BY: [Name] | TITLE: [Title]<br>ROOM: [Room]<br>DATE: 12/20/2018<br>SCALE: 1/8" = 1'-0" |

# Total Wattage per Number of EcoSlim Fixtures

All Revelation fixtures must be powered by a UL Listed or CE Compliant 24V DC power supply.  
This table provides information for properly sizing a power supply given the number of fixtures in a given installation.

| No. of Fixtures | ES26 Series              |                           | ES33 Series              |                           |
|-----------------|--------------------------|---------------------------|--------------------------|---------------------------|
|                 | Required Current<br>Amps | Required Current<br>Watts | Required Current<br>Amps | Required Current<br>Watts |
| 1               | 2.38                     | 57.12                     | 1.78                     | 42.72                     |
| 2               | 4.76                     | 114.24                    | 3.56                     | 85.44                     |
| 3               | 7.14                     | 171.36                    | 5.34                     | 128.16                    |
| 4               | 9.52                     | 228.48                    | 7.12                     | 170.88                    |
| 5               | 11.9                     | 285.6                     | 8.9                      | 213.6                     |
| 6               | 14.28                    | 342.72                    | 10.68                    | 256.32                    |
| 7               | 16.66                    | 399.84                    | 12.46                    | 299.04                    |
| 8               | 19.04                    | 456.96                    | 14.24                    | 341.76                    |
| 9               | 21.42                    | 514.08                    | 16.02                    | 384.48                    |
| 10              | 23.8                     | 571.2                     | 17.8                     | 427.2                     |
| 11              | 26.18                    | 628.32                    | 19.58                    | 469.92                    |
| 12              | 28.56                    | 685.44                    | 21.36                    | 512.64                    |
| 13              | 30.94                    | 742.56                    | 23.14                    | 555.36                    |
| 14              | 33.32                    | 799.68                    | 24.92                    | 598.08                    |
| 15              | 35.7                     | 856.8                     | 26.7                     | 640.8                     |
| 16              | 38.08                    | 913.92                    | 28.48                    | 683.52                    |
| 17              | 40.46                    | 971.04                    | 30.26                    | 726.24                    |
| 18              | 42.84                    | 1028.16                   | 32.04                    | 768.96                    |
| 19              | 45.22                    | 1085.28                   | 33.82                    | 811.68                    |
| 20              | 47.6                     | 1142.4                    | 35.6                     | 854.4                     |
| 21              | 49.98                    | 1199.52                   | 37.38                    | 897.12                    |
| 22              | 52.36                    | 1256.64                   | 39.16                    | 939.84                    |
| 23              | 54.74                    | 1313.76                   | 40.94                    | 982.56                    |
| 24              | 57.12                    | 1370.88                   | 42.72                    | 1025.28                   |
| 25              | 59.5                     | 1428                      | 44.5                     | 1068                      |
| 26              | 61.88                    | 1485.12                   | 46.28                    | 1110.72                   |
| 27              | 64.26                    | 1542.24                   | 48.06                    | 1153.44                   |
| 28              | 66.64                    | 1599.36                   | 49.84                    | 1196.16                   |
| 29              | 69.02                    | 1656.48                   | 51.62                    | 1238.88                   |
| 30              | 71.4                     | 1713.6                    | 53.4                     | 1281.6                    |
| 31              | 73.78                    | 1770.72                   | 55.18                    | 1324.32                   |
| 32              | 76.16                    | 1827.84                   | 56.96                    | 1367.04                   |
| 33              | 78.54                    | 1884.96                   | 58.74                    | 1409.76                   |
| 34              | 80.92                    | 1942.08                   | 60.52                    | 1452.48                   |
| 35              | 83.3                     | 1999.2                    | 62.3                     | 1495.2                    |

# Total Wattage per Number of EcoSlim Fixtures

All Revelation fixtures must be powered by a UL Listed or CE Compliant 24V DC power supply.  
This table provides information for properly sizing a power supply given the number of fixtures in a given installation.

| No. of Fixtures | ES34 Series              |                           | ES36 Series              |                           |
|-----------------|--------------------------|---------------------------|--------------------------|---------------------------|
|                 | Required Current<br>Amps | Required Current<br>Watts | Required Current<br>Amps | Required Current<br>Watts |
| 1               | 2.19                     | 52.56                     | 2.73                     | 65.52                     |
| 2               | 4.38                     | 105.12                    | 5.46                     | 131.04                    |
| 3               | 6.57                     | 157.68                    | 8.19                     | 196.56                    |
| 4               | 8.76                     | 210.24                    | 10.92                    | 262.08                    |
| 5               | 10.95                    | 262.8                     | 13.65                    | 327.6                     |
| 6               | 13.14                    | 315.36                    | 16.38                    | 393.12                    |
| 7               | 15.33                    | 367.92                    | 19.11                    | 458.64                    |
| 8               | 17.52                    | 420.48                    | 21.84                    | 524.16                    |
| 9               | 19.71                    | 473.04                    | 24.57                    | 589.68                    |
| 10              | 21.9                     | 525.6                     | 27.3                     | 655.2                     |
| 11              | 24.09                    | 578.16                    | 30.03                    | 720.72                    |
| 12              | 26.28                    | 630.72                    | 32.76                    | 786.24                    |
| 13              | 28.47                    | 683.28                    | 35.49                    | 851.76                    |
| 14              | 30.66                    | 735.84                    | 38.22                    | 917.28                    |
| 15              | 32.85                    | 788.4                     | 40.95                    | 982.8                     |
| 16              | 35.04                    | 840.96                    | 43.68                    | 1048.32                   |
| 17              | 37.23                    | 893.52                    | 46.41                    | 1113.84                   |
| 18              | 39.42                    | 946.08                    | 49.14                    | 1179.36                   |
| 19              | 41.61                    | 998.64                    | 51.87                    | 1244.88                   |
| 20              | 43.8                     | 1051.2                    | 54.6                     | 1310.4                    |
| 21              | 45.99                    | 1103.76                   | 57.33                    | 1375.92                   |
| 22              | 48.18                    | 1156.32                   | 60.06                    | 1441.44                   |
| 23              | 50.37                    | 1208.88                   | 62.79                    | 1506.96                   |
| 24              | 52.56                    | 1261.44                   | 65.52                    | 1572.48                   |
| 25              | 54.75                    | 1314                      | 68.25                    | 1638                      |
| 26              | 56.94                    | 1366.56                   | 70.98                    | 1703.52                   |
| 27              | 59.13                    | 1419.12                   | 73.71                    | 1769.04                   |
| 28              | 61.32                    | 1471.68                   | 76.44                    | 1834.56                   |
| 29              | 63.51                    | 1524.24                   | 79.17                    | 1900.08                   |
| 30              | 65.7                     | 1576.8                    | 81.9                     | 1965.6                    |
| 31              | 67.89                    | 1629.36                   | 84.63                    | 2031.12                   |
| 32              | 70.08                    | 1681.92                   | 87.36                    | 2096.64                   |
| 33              | 72.27                    | 1734.48                   | 90.09                    | 2162.16                   |
| 34              | 74.46                    | 1787.04                   | 92.82                    | 2227.68                   |
| 35              | 76.65                    | 1839.6                    | 95.55                    | 2293.2                    |

# Total Wattage per Number of EcoSlim Fixtures

All Revelation fixtures must be powered by a UL Listed or CE Compliant 24V DC power supply.

This table provides information for properly sizing a power supply given the number of fixtures in a given installation.

| No. of Fixtures | ES44 Series              |                           |
|-----------------|--------------------------|---------------------------|
|                 | Required Current<br>Amps | Required Current<br>Watts |
| 1               | 2.46                     | 59.04                     |
| 2               | 4.92                     | 118.08                    |
| 3               | 7.38                     | 177.12                    |
| 4               | 9.84                     | 236.16                    |
| 5               | 12.3                     | 295.2                     |
| 6               | 14.76                    | 354.24                    |
| 7               | 17.22                    | 413.28                    |
| 8               | 19.68                    | 472.32                    |
| 9               | 22.14                    | 531.36                    |
| 10              | 24.6                     | 590.4                     |
| 11              | 27.06                    | 649.44                    |
| 12              | 29.52                    | 708.48                    |
| 13              | 31.98                    | 767.52                    |
| 14              | 34.44                    | 826.56                    |
| 15              | 36.9                     | 885.6                     |
| 16              | 39.36                    | 944.64                    |
| 17              | 41.82                    | 1003.68                   |
| 18              | 44.28                    | 1062.72                   |
| 19              | 46.74                    | 1121.76                   |
| 20              | 49.2                     | 1180.8                    |
| 21              | 51.66                    | 1239.84                   |
| 22              | 54.12                    | 1298.88                   |
| 23              | 56.58                    | 1357.92                   |
| 24              | 59.04                    | 1416.96                   |
| 25              | 61.5                     | 1476                      |
| 26              | 63.96                    | 1535.04                   |
| 27              | 66.42                    | 1594.08                   |
| 28              | 68.88                    | 1653.12                   |
| 29              | 71.34                    | 1712.16                   |
| 30              | 73.8                     | 1771.2                    |
| 31              | 76.26                    | 1830.24                   |
| 32              | 78.72                    | 1889.28                   |
| 33              | 81.18                    | 1948.32                   |
| 34              | 83.64                    | 2007.36                   |
| 35              | 86.1                     | 2066.4                    |
| 36              | 88.56                    | 2125.44                   |



# Wire Sizing Chart

This chart is a guideline for recommended wiring practice.

Applies to 24V DC power only, i.e. from “fixture to power supply.”

Not meant for “V AC to power supply” nor “dimmer to power supply.”

Wire sizes in AWG Conversion chart below.

| Distance: Feet (Meters) | AWG for 5A | AWG for 10A | AWG for 15A |
|-------------------------|------------|-------------|-------------|
| 20 (6)                  | 18         | 14          | 12          |
| 30 (9)                  | 16         | 12          | 10          |
| 40 (12)                 | 14         | 10          | 10          |
| 50 (15)                 | 12         | 10          | *           |
| 60 (18)                 | 12         | 10          | *           |
| 80 (24)                 | 10         | *           | *           |
| 100 (30)                | 10         | *           | *           |

\* Terminal block wire range #10 - #22 Awg.

| AWG | MM    |
|-----|-------|
| 10  | 6.271 |
| 11  | 5.156 |
| 12  | 3.302 |
| 13  | 2.629 |
| 14  | 2.088 |
| 15  | 1.652 |
| 16  | 1.308 |
| 17  | 1.039 |
| 18  | 0.823 |