

27REI LIGHTING CHART

Programmed at 20% 110W Max Load w/ Emergency Dimming

| Luminaire wattage | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-------------------------------------|------|------|------|------|------|------|------|------|------|------|
| Emergency Dim to 20% (W) | 2.8 | 3 | 3.2 | 3.4 | 3.6 | 3.8 | 4 | 4.2 | 4.4 | 4.6 |
| # of Emergency Luminaires | 7 | 7 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 4 |
| actual wattage from 27-REI used | 19.6 | 21 | 19.2 | 20.4 | 21.6 | 19 | 20 | 21 | 22 | 18.4 |
| lumens per fixture 140 l/w | 392 | 420 | 448 | 476 | 504 | 532 | 560 | 588 | 616 | 644 |
| Lumens per EM fixture ** | 333 | 357 | 381 | 405 | 428 | 452 | 476 | 500 | 524 | 547 |
| Total System Lumens provided | 2332 | 2499 | 2285 | 2428 | 2570 | 2261 | 2380 | 2499 | 2618 | 2190 |
| Total fixture wattage (Max. 110 W) | 98 | 105 | 96 | 102 | 108 | 95 | 100 | 105 | 110 | 92 |

| Luminaire wattage | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |
|-------------------------------------|------|------|------|------|------|------|------|------|------|------|
| Emergency Dim to 20% (W) | 4.8 | 5 | 5.2 | 5.4 | 5.6 | 5.8 | 6 | 6.2 | 6.4 | 6.6 |
| # of Emergency Luminaires | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 |
| actual wattage from 27-REI used | 19.2 | 20 | 20.8 | 21.6 | 16.8 | 17.4 | 18 | 18.6 | 19.2 | 19.8 |
| lumens per fixture 140 l/w | 672 | 700 | 728 | 756 | 784 | 812 | 840 | 868 | 896 | 924 |
| Lumens per EM fixture ** | 571 | 595 | 619 | 643 | 666 | 690 | 714 | 738 | 762 | 785 |
| Total System Lumens provided | 2285 | 2380 | 2475 | 2570 | 1999 | 2071 | 2142 | 2213 | 2285 | 2356 |
| Total fixture wattage (Max. 110 W) | 96 | 100 | 104 | 108 | 84 | 87 | 90 | 93 | 96 | 99 |

| Luminaire wattage | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 |
|-------------------------------------|------|------|------|------|------|------|------|------|------|------|
| Emergency Dim to 20% (W) | 6.8 | 7 | 7.2 | 7.4 | 7.6 | 7.8 | 8 | 8.2 | 8.4 | 8.6 |
| # of Emergency Luminaires | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 |
| actual wattage from 27-REI used | 20.4 | 21 | 21.6 | 22.2 | 15.2 | 15.6 | 16 | 16.4 | 16.8 | 17.2 |
| lumens per fixture 140 l/w | 952 | 980 | 1008 | 1036 | 1064 | 1092 | 1120 | 1148 | 1176 | 1204 |
| Lumens per EM fixture ** | 809 | 833 | 857 | 881 | 904 | 928 | 952 | 976 | 1000 | 1023 |
| Total System Lumens provided | 2428 | 2499 | 2570 | 2642 | 1809 | 1856 | 1904 | 1952 | 1999 | 2047 |
| Total fixture wattage (Max. 110 W) | 102 | 105 | 108 | 111 | 76 | 78 | 80 | 82 | 84 | 86 |

| Luminaire wattage | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 |
|-------------------------------------|------|------|------|------|------|------|------|------|------|------|
| Emergency Dim to 20% (W) | 8.8 | 9 | 9.2 | 9.4 | 9.6 | 9.8 | 10 | 10.2 | 10.4 | 10.6 |
| # of Emergency Luminaires | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| actual wattage from 27-REI used | 17.6 | 18 | 18.4 | 18.8 | 19.2 | 19.6 | 20 | 20.4 | 20.8 | 21.2 |
| lumens per fixture 140 l/w | 1232 | 1260 | 1288 | 1316 | 1344 | 1372 | 1400 | 1428 | 1456 | 1484 |
| Lumens per EM fixture ** | 1047 | 1071 | 1095 | 1119 | 1142 | 1166 | 1190 | 1214 | 1238 | 1261 |
| Total System Lumens provided | 2094 | 2142 | 2190 | 2237 | 2285 | 2332 | 2380 | 2428 | 2475 | 2523 |
| Total fixture wattage (Max. 110 W) | 88 | 90 | 92 | 94 | 96 | 98 | 100 | 102 | 104 | 106 |

| Luminaire wattage | 54 | 55 | 56 | 58 | 60 | 62-100 | | | up to 27 |
|-------------------------------------|------|------|------|------|------|--------|--|--|----------|
| Emergency Dim to 20% (W) | 10.8 | 11 | 11.2 | 11.6 | 12 | 15-25 | | | up to 27 |
| # of Emergency Luminaires | 2 | 2 | 1 | 1 | 1 | 1 | | | 1 |
| actual wattage from 27-REI used | 21.6 | 22 | 11.2 | 11.6 | 12 | | | | 1 |
| lumens per fixture 140 l/w | 1512 | 1540 | 1568 | 1624 | 1680 | | | | 140 |
| Lumens per EM fixture ** | 1285 | 1309 | 1333 | 1380 | 1428 | | | | |
| Total System Lumens provided | 2570 | 2618 | 1333 | 1380 | 1428 | | | | |
| Total fixture wattage (Max. 110 W) | 108 | 110 | 56 | 58 | 58 | 60 | | | |

The 27REI can be re-programmed to enable 3.0 Vdc in emergency from the Violet/Blk and Pink/Blk leads when using the Emergency Dimming feature. See instructions.

All calculations based on 10-55C

1. Define the wattage of the normal/emergency luminaire.
2. Determine from the chart how many emergency luminaires can be used with the 27REI for 90 minutes
3. Use a lighting calculation program to determine spacing of emergency luminaires to meet life safety and local code requirements for egress.
4. Ensure that the total normal/(emergency) luminaire(s) or connected loads do not exceed 110 W.
5. LED Luminaires must incorporate linear 0-10Vdc dimming drivers and be wired with the 27REI when using the Emergency Dimming functions. Not compatible with logarithmic dimming drivers.
6. **All Selection Chart Calculations are based on 85% driver efficiency and 140Lm/W efficacy.

27REI LIGHTING CHART

Programmed at 30% 80W Max Load w/ Emergency Dimming

NOTE: 27REI is programmed at 20% but can be reprogrammed by end user to 30%

| Luminaire wattage | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Emergency Dim to 30% (W) | 4.2 | 4.5 | 4.8 | 5.1 | 5.4 | 5.7 | 6 | 6.3 | 6.6 | 6.9 |
| # of Emergency Luminaires | 5.0 | 5.0 | 5.0 | 4.0 | 4.0 | 4.0 | 4.0 | 3.0 | 3.0 | 3.0 |
| actual wattage from 27-REI used | 21 | 22.5 | 24 | 20.4 | 21.6 | 22.8 | 24 | 18.9 | 19.8 | 20.7 |
| lumens per fixture 140 I/w | 588 | 630 | 672 | 714 | 756 | 798 | 840 | 882 | 924 | 966 |
| Lumens per EM fixture ** | 500 | 536 | 571 | 607 | 643 | 678 | 714 | 750 | 785 | 821 |
| Total System Lumens provided | 2499 | 2678 | 2856 | 2428 | 2570 | 2713 | 2856 | 2249 | 2356 | 2463 |
| Total fixture wattage (Max. 110 W) | 70 | 75 | 80 | 68 | 72 | 76 | 80 | 63 | 66 | 69 |

| Luminaire wattage | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |
|-------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Emergency Dim to 30% (W) | 7.2 | 7.5 | 7.8 | 8.1 | 8.4 | 8.7 | 9 | 9.3 | 9.6 | 9.9 |
| # of Emergency Luminaires | 3.0 | 3.0 | 3.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| actual wattage from 27-REI used | 21.6 | 22.5 | 23.4 | 16.2 | 16.8 | 17.4 | 18 | 18.6 | 19.2 | 19.8 |
| lumens per fixture 140 I/w | 1008 | 1050 | 1092 | 1134 | 1176 | 1218 | 1260 | 1302 | 1344 | 1386 |
| Lumens per EM fixture ** | 857 | 893 | 928 | 964 | 1000 | 1035 | 1071 | 1107 | 1142 | 1178 |
| Total System Lumens provided | 2570 | 2678 | 2785 | 1928 | 1999 | 2071 | 2142 | 2213 | 2285 | 2356 |
| Total fixture wattage (Max. 110 W) | 72 | 75 | 78 | 54 | 56 | 58 | 60 | 62 | 64 | 66 |

| Luminaire wattage | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 |
|-------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Emergency Dim to 30% (W) | 10.2 | 10.5 | 10.8 | 11.1 | 11.4 | 11.7 | 12 | 12.3 | 12.6 | 12.9 |
| # of Emergency Luminaires | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.0 | 1.0 | 1.0 |
| actual wattage from 27-REI used | 20.4 | 21 | 21.6 | 22.2 | 22.8 | 23.4 | 24 | 12.3 | 12.6 | 12.9 |
| lumens per fixture 140 I/w | 1428 | 1470 | 1512 | 1554 | 1596 | 1638 | 1680 | 1722 | 1764 | 1806 |
| Lumens per EM fixture ** | 1214 | 1250 | 1285 | 1321 | 1357 | 1392 | 1428 | 1464 | 1499 | 1535 |
| Total System Lumens provided | 2428 | 2499 | 2570 | 2642 | 2713 | 2785 | 2856 | 1464 | 1499 | 1535 |
| Total fixture wattage (Max. 110 W) | 68 | 70 | 72 | 74 | 76 | 78 | 80 | 41 | 42 | 43 |

| Luminaire wattage | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 |
|-------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Emergency Dim to 30% (W) | 13.2 | 13.5 | 13.8 | 14.1 | 14.4 | 14.7 | 15 | 15.3 | 15.6 | 15.9 |
| # of Emergency Luminaires | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| actual wattage from 27-REI used | 13.2 | 13.5 | 13.8 | 14.1 | 14.4 | 14.7 | 15 | 15.3 | 15.6 | 15.9 |
| lumens per fixture 140 I/w | 1848 | 1890 | 1932 | 1974 | 2016 | 2058 | 2100 | 2142 | 2184 | 2226 |
| Lumens per EM fixture ** | 1571 | 1607 | 1642 | 1678 | 1714 | 1749 | 1785 | 1821 | 1856 | 1892 |
| Total System Lumens provided | 1571 | 1607 | 1642 | 1678 | 1714 | 1749 | 1785 | 1821 | 1856 | 1892 |
| Total fixture wattage (Max. 110 W) | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 |

| Luminaire wattage | 54 | 55 | 56 | 58 | 60 | 62-80 | | | up to 27 | |
|-------------------------------------|------------|------------|------------|------------|------------|----------|--|--|----------|--|
| Emergency Dim to 30% (W) | 16.2 | 16.5 | 16.8 | 17.4 | 18 | 18-27 | | | up to 27 | |
| # of Emergency Luminaires | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1 | | | 1 | |
| actual wattage from 27-REI used | 16.2 | 16.5 | 16.8 | 17.4 | 18 | | | | | |
| lumens per fixture 140 I/w | 2268 | 2310 | 2352 | 2436 | 2520 | | | | | |
| Lumens per EM fixture ** | 1928 | 1964 | 1999 | 2071 | 2142 | | | | | |
| Total System Lumens provided | 1928 | 1964 | 1999 | 2071 | 2142 | | | | | |
| Total fixture wattage (Max. 110 W) | 54 | 55 | 56 | 58 | 60 | | | | | |