



# ELECTRIC INFRARED REPLACEMENT HEATING ELEMENTS



| CLEAR & RED QUARTZ LAMPS  | WWG MODEL # | Item #    | Watts | Volts   | Length (in.) |            | Fits Model      | Lamp Type |
|---|-------------|-----------|-------|---------|--------------|------------|-----------------|-----------|
|   |             |           |       |         | Overall      | Heated     |                 |           |
|  <p><i>Short Wavelength</i></p>  | 1UMN3       | 630-16209 | 1600  | 208     | 19 1/16      | 16         | 222/223 or MM24 | Clear     |
|   | 1UMN4       | 630-16249 |       | 240     |              |            |                 |           |
|   | 2KCZ8       | 630-16489 |       | 480     |              |            |                 |           |
| <ul style="list-style-type: none"> <li>Coiled tungsten filament; sealed porcelain end caps; halogen gas filled</li> <li>Color temperature emitted: approx. 4100° F (high brightness)</li> <li>Approximately 96% radiant efficiency</li> <li>Excellent resistance to thermal shock</li> <li>3/8" Diameter clear or red quartz envelope</li> </ul> <p>Note: Item # (*)<br/>630 = Horizontal Burning "Clear"<br/>631 = Vertical OR Horizontal Burning "Clear"<br/>632 = Horizontal Burning "Red"</p> | 2KCZ9       | 630-25249 | 2500  | 240     | 28 1/16      | 25         | 342/343 OR MM33 | Clear     |
|   | 2KDA1       | 630-25489 |       | 480     |              |            |                 |           |
|   | 31TP46      | 631-25489 |       | 480     |              |            |                 |           |
|   | 1UMN5       | 630-36489 | 3650  | 480     | 41 1/16      | 38         | 462/463 or MM46 | Red       |
|   | 31TP48      | 632-1620  | 1600  | 208     | 19 1/16      | 16         | 222/223 or RPH  |           |
|   | 31TP49      | 632-1624  |       | 240     |              |            |                 |           |
| 31TP50  | 632-2548    | 2500      | 480   | 28 1/16 | 25           | 342 or 343 |                 |           |

| QUARTZ TUBES  | GRAINGER MODEL # | Item #    | Watts | Volts | Length (in.) |         | Fits Model |
|---|------------------|-----------|-------|-------|--------------|---------|------------|
|   |                  |           |       |       | Overall      | Heated  |            |
|  <p><i>Medium Wavelength</i></p>   | 1UMN6            | 671-3784  | 1500  | 120   | 39 1/16      | 34 3/16 | OCH-46     |
|   | 31TP47           | 671-3785  | 2000  | 240   |              |         |            |
|   | 1UMN7            | 671-5060  | 3000  | 208   | 50 1/16      | 45 3/16 | OCH-57     |
|   | 1UMN8            | 671-3786  | 3000  | 240   |              |         |            |
| <ul style="list-style-type: none"> <li>5/8" Diameter frosted quartz envelope</li> <li>Nickel-chrome alloy coiled element with porcelain end caps and pigtailed terminations</li> <li>Approximately 60% radiant efficiency</li> <li>Fast heat-up/cool-down</li> <li>Mechanical ruggedness: Good</li> </ul> | 1UMN9            | 671-3454  | 450   | 120   | 12 15/16     | 8 7/16  | FFH-912B   |
|   | 1UMP1            | 671-3492* | 550   | 120   | 19 1/2       | 16      | FFH-512A   |
|   | 1UMP2            | 671-5056  | 1000  | 120   | 18 5/16      | 14 7/16 | CH-2212-1C |
|   | 1UMP3            | 671-5057  | 1425  | 240   | 27 5/16      | 23 7/16 | CH-6424-1C |

## FLAT PANEL EMITTER ELEMENTS (for discontinued MR, CH & FHK Heaters)

| GRAINGER MODEL # | MFG MODEL # | WATTS | VOLTS | Dim. (in.) |    | Fits "Discontinued" Heater Model  |                       | Replaces element      |
|------------------|-------------|-------|-------|------------|----|-----------------------------------|-----------------------|-----------------------|
|                  |             |       |       | L          | W  | Fostoria Model #                  | Grainger Model #      | Grainger Model #      |
| 45EM42           | 64337-022   | 3150  | 208   | 48         | 3  | MR-420-1, CH-420-1C, CH-420-3A    | 20HN41, 15A734, 2KDA3 | 20HN55, 15A748, 1UMP7 |
| 45EM43           | 64337-023   |       | 240   |            |    | MR-424-1, CH-424-1C, CH-424-1A    | 20HN42, 15A735, 2KDA4 | 20HN56, 15A749, 1UMP8 |
| 45EM44           | 64337-025   |       | 480   |            |    | MR-448-1, CH-448-1C, CH-448-1A    | 20HN43, 15A736, 2KDA5 | 20HN57; 15A750, 1UMP9 |
| 45EM45           | 64337-027   | 4300  | 208   | 29         | 12 | MR-620-3, CH-620-3C, CH-620-3A    | 20HN44, 15A737, 2E971 | 20HN52, 15A745, 1UMP4 |
| 45EM46           | 64337-028   |       | 240   |            |    | MR-624-3, CH-624-3C, CH-624-3A    | 20HN45, 15A738, 2E972 | 20HN53, 15A746, 1UMP5 |
| 45EM47           | 64337-030   |       | 480   |            |    | MR-648-3, CH-648-3C, CH-648-3A    | 20HN46, 15A739, 2E973 | 20HN54; 15A747, 1UMP6 |
| 45EM48           | 64337-032   | 9500  | 208   | 51         | 12 | MR-1320-3, CH-1320-3B, CH-1320-3A | 20HN47, 15A740, 3E545 | 20HN55, 15A748, 1UMP7 |
| 45EM49           | 64337-033   |       | 240   |            |    | MR-1324-3, CH-1324-3B, CH-1324-3A | 20HN48, 15A741, 3E546 | 20HN56, 15A749, 1UMP8 |
| 45EM50           | 64337-035   |       | 480   |            |    | MR-1348-3, CH-1348-3B, CH-1348-3A | 20HN49, 15A742, 3E547 | 20HN57; 15A750, 1UMP9 |
| 45EM51           | 64337-038   | 9500  | 240   | 57         | 12 | MR-2724-3, CH-2724-3C, CH-2724-3B | 20HN50, 15A743, 3UD71 | 20HN56, 15A749, 1UMP8 |
| 45EM52           | 64337-040   |       | 480   |            |    | MR-2748-3, CH-2748-3C, CH-2748-3B | 20HN51, 15A744, 3UD72 | 20HN57; 15A750, 1UMP9 |
| 45EM53           | 64337-050   | 4300  | 240   | 27         | 12 | FHK-624-3A                        | 2E529                 | 30PL15, 20HN53, 1UMP5 |
| 45EM54           | 64337-051   |       | 480   |            |    | FHK-648-3A                        | 2E530                 | 30PL16, 20HN54; 1UMP6 |
| 45EM55           | 64337-053   | 9500  | 240   | 49         | 12 | FHK-1324-3A                       | 3E214                 | 30PL18, 20HN56, 1UMP8 |
| 45EM56           | 64337-054   |       | 480   |            |    | FHK-1348-3A                       | 3E215                 | 30PL19, 20HN57; 1UMP9 |

