



## LOW IRON KIT

LOW RANGE COMPARATOR, 0.05-1.0 ppm

CODE 7787-01

QUANTITY	CONTENTS	CODE
30 mL	*Iron Reagent #1	*4450-G
4.5g	*Iron Reagent #2 Powder	*4451-S
3	Test Tubes, glass, 10mL, w/caps	0843
1	Spoon, 0.15g, plastic	0727
1	Low Range Comparator Viewer	1102
1	Iron Low Range Comparator Bar, 0.05-1.0 ppm	7788-01

\*WARNING: Reagents marked with an \* are considered to be potential health hazards. To view or print a Safety Data Sheet (SDS) for these reagents go to [www.lamotte.com](http://www.lamotte.com). Search for the four digit reagent code number listed on the reagent label, in the contents list or in the test procedures. Omit any letter that follows or precedes the four digit code number. For example, if the code is 4450WT-H, search 4450. To obtain a printed copy, contact LaMotte by email, phone or fax.

Emergency information for all LaMotte reagents is available from Chem-Tel:  
(US, 1-800-255-3924)  
(International, call collect, 813-248-0585)

To order individual reagents or test kit components, use the specified code number.

Warning! This set contains chemicals that may be harmful if misused. Read cautions on individual containers carefully. Not to be used by children except under adult supervision.

### LaMOTTE COMPANY

Helping People Solve Analytical Challenges

PO Box 329 · Chestertown · Maryland · 21620 · USA  
800-344-3100 · 410-778-3100 [Outside USA.] · Fax 410-778-6394  
Visit us on the web at [www.lamotte.com](http://www.lamotte.com)

## USE OF THE LOW RANGE COMPARATOR

---

The Low Range Comparator allows extremely faint colors to be matched to color standards by viewing the reaction down the length of the tube increasing the path length by ten times compared to comparators that view the reaction across the diameter of the tube.

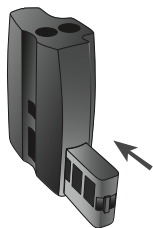


fig.1



fig.2

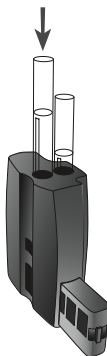


fig.3

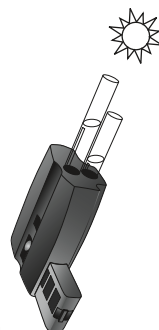


fig.4

1. Slide the Low Range Comparator Bar into the Low Range Comparator (fig.1).
2. Fill a test tube to the 10 mL line with untreated sample water. Insert it in the rear hole on the top of the Low Range Comparator (fig.2).
3. Fill a test tube with sample water. Follow the test procedure. Remove the cap. Insert the tube in the front hole on the top of the Low Range Comparator (fig.3).
4. Position the comparator so that light shines down through the test tubes (fig.4). Tilt the comparator until the color standards and sample are illuminated. Match the color of the reaction to the color standards. Read the result from the Low Range Comparator Bar.

## PROCEDURE

---

### TEST RANGE: 0.05 - 1.0 ppm

---

5. Slide the Iron Low Range Comparator Bar (7788-01) into the Low Range Comparator Viewer (1102). Fill a test tube (0843) to the 10mL line with sample water. Place in Low Range Comparator.
6. Fill a test tube (0843) to line with sample water.
7. Add ten drops of \*Iron Reagent #1 (4450). Cap and invert to mix.
8. Use the 0.15g spoon (0727) to add one level spoonful of \*Iron Reagent #2 (4451). Cap and mix until dissolved. Wait 3 minutes.
9. Remove the cap from the test tube. Place the tube in the Low Range Comparator. Match the sample color to a color standard. Record as ppm iron.