Quasinormal modes expansions for nanoresonators made of absorbing dielectric materials: study of the role of static modes: supplement

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We show in this Supplemental document the field distribution of a few static modes. In addition, we list the modes (eigenfrequencies, degree, and polarization) that have been used to test the convergence rate of the QNM expansion. Table S1 includes the modes used in Fig. 2 (lossless sphere) and Table S2 includes the modes used in Fig. 4 (silicon sphere).

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1. Field distribution of the static modes
Because of the spherical symmetry of the system, the electric field of any mode, including static modes, can be written as

\[ \mathbf{E} = E_r(r, \theta)e^{im\phi}\mathbf{e}_r + E_\theta(r, \theta)e^{im\phi}\mathbf{e}_\theta + E_\phi(r, \theta)e^{im\phi}\mathbf{e}_\phi, \] (S1)

where \((\mathbf{e}_r, \mathbf{e}_\theta, \mathbf{e}_\phi)\) are the unitary vectors of the spherical coordinates. The functions \(E_r, E_\theta,\) and \(E_\phi\) depend on the degree \(l.\) Since the incident field is a circularly polarized plane wave, only modes with \(m = 1\) can be excited.

In the case of static modes, the radial variation of the field components is given by \((r/R)^{l-1}\) inside the sphere and \((R/r)^{l+2}\) outside the sphere. The polar variation is given by Legendre polynomials. More details can be found in Ref. [12] of the main text.

Figures S1-S3 show the electric-field distribution of the first three static modes with \(l = 1, l = 2,\) and \(l = 3\) in the case of the lossless sphere (radius \(R = 75\) nm and refractive index \(n = 4\)). The modes have been normalized with Eq. (9) in the main text.

It is noteworthy that, whatever the value of the degree \(l,\) the radial component is purely real, \(\text{Im}(E_r) = 0,\) the polar component is purely real \(\text{Im}(E_\theta) = 0,\) and the azimuthal component if purely imaginary, \(\text{Re}(E_\phi) = 0.\) This property, together with the variation of the field components with the angle \(\theta,\) results in the cancellation of the extinction cross-section of static modes in the case of a lossless sphere.
Fig. S1. Electric-field distribution inside the lossless sphere (radius $R = 75$ nm and refractive index $n = 4$) of the electric static mode with $l = 1$ and $m = 1$. (a) Real part of the radial component, $\text{Re}(E_r)$. (b) Real part of the polar component, $\text{Re}(E_\theta)$. (c) Imaginary part of the azimuthal component, $\text{Im}(E_\phi)$. The field is represented in the $(x,z)$ plane that corresponds to $\phi = 0$. The field for any other value of the angle $\phi$ can be deduced by multiplying with the $\exp(im\phi)$ factor, see Eq. (S1). Note that $\text{Im}(E_\phi)$ is a constant.

Fig. S2. Electric-field distribution inside the lossless sphere (radius $R = 75$ nm and refractive index $n = 4$) of the electric static mode with $l = 2$ and $m = 1$. (a) Real part of the radial component, $\text{Re}(E_r)$. (b) Real part of the polar component, $\text{Re}(E_\theta)$. (c) Imaginary part of the azimuthal component, $\text{Im}(E_\phi)$.

Fig. S3. Electric-field distribution inside the lossless sphere (radius $R = 75$ nm and refractive index $n = 4$) of the electric static mode with $l = 3$ and $m = 1$. (a) Real part of the radial component, $\text{Re}(E_r)$. (b) Real part of the polar component, $\text{Re}(E_\theta)$. (c) Imaginary part of the azimuthal component, $\text{Im}(E_\phi)$. 

2. Modes of the lossless sphere used in Fig. 2

The following Table lists the 500 QNMs of the lossless sphere (radius $R = 75 \text{ nm}$ and refractive index $n = 4$) that have been used in Fig. 2 to test the convergence of the QNM expansion. The modes are sorted in descending order according to their contribution to the extinction cross-section, $\iiint_{V_S} \text{Im}\left(\Delta \alpha_m \bar{E}_m \cdot \bar{E}_0\right) d^3 r$, at $k_0 = 9.971 \mu\text{m}^{-1}$. The first column of Table S1 contains the number of the modes in the sorted list. These 500 QNMs have a contribution to the cross-section larger than $6 \times 10^{-11}$.

The modes are characterized by their degree $l$ (or longitudinal number) and polarization. The latter can be electric (TM) or magnetic (TE). The second and third columns list the degree $l$ and the polarization, respectively. The fourth and fifth columns contain the real and imaginary parts of the eigenfrequency. The latter is negative because we consider harmonic fields with the $\exp(-i\omega t)$ convention.

The eigenfrequencies are located either in the lower right quadrant (4th quadrant, $\text{Re}(\bar{\omega}_m) > 0$ and $\text{Im}(\bar{\omega}_m) < 0$) of the complex plane or in the lower left quadrant (3rd quadrant, $\text{Re}(\bar{\omega}_m) < 0$ and $\text{Im}(\bar{\omega}_m) < 0$). Each eigenfrequency $\bar{\omega}_m$ in the 4th quadrant is paired with a $-\bar{\omega}_m^*$ twin in the 3rd quadrant, except those with a null real part. In Table S1, the modes do not necessarily appear by pairs because we sort them with respect to their contribution to the extinction cross-section and we keep only the first 500 modes. The sixth column contains a star ‘*’ to mark the twin modes located in the 3rd quadrant. The modes without marker belong to the 4th quadrant.

The list includes 136 electric modes with $l = 1$ (68 in the 4th quadrant and 68 in the 3rd quadrant), 152 magnetic modes with $l = 1$ (77 in the 4th quadrant and 75 in the 3rd quadrant), 63 electric modes with $l = 2$ (32 in the 4th quadrant and 31 in the 3rd quadrant), 75 magnetic modes with $l = 2$ (38 in the 4th quadrant and 37 in the 3rd quadrant), 26 electric modes with $l = 3$ (13 in the 4th quadrant and 13 in the 3rd quadrant), 28 magnetic modes with $l = 3$ (15 in the 4th quadrant and 13 in the 3rd quadrant), 14 electric modes with $l = 4$ (8 in the 4th quadrant and 6 in the 3rd quadrant), 4 magnetic modes with $l = 4$ (2 in the 4th quadrant and 2 in the 3rd quadrant), 2 electric modes with $l = 5$ (1 in the 4th quadrant and 1 in the 3rd quadrant), and 0 magnetic modes with $l = 5$.

Table S1. List of the 500 QNMs used in Fig. 2 to test the convergence of the QNM expansion in the case of the lossless sphere (refractive index $n = 4$). First column: mode number in the sorted expansion. Second column: degree $l$. Third column: polarization, electric (TE) or magnetic (TM). Fourth column: real part of the eigenfrequency. Fifth column: imaginary part (negative) of the eigenfrequency. Sixth column: the modes marked with a star ‘*’ belong to the 3rd quadrant of the complex plane; the modes without marker belong to the 4th quadrant.

| # | l | Polarization | Re($\bar{\omega}_m$)/c ($\mu\text{m}^{-1}$) | Im($\bar{\omega}_m$)/c ($\mu\text{m}^{-1}$) |
|---|---|-------------|-----------------|-----------------|
| 1 | 1 | Magnetic | 10.0504300118 | -0.320402672393 |
| 2 | 1 | Electric | 14.036463767 | -0.964732350151 |
| 3 | 1 | Electric | 13.8599878537 | -6.67912866412 |
| 4 | 1 | Electric | -13.8599878537 | -6.67912866412 * |
| 5 | 1 | Electric | -14.036463767 | -0.964732350151 * |
| 6 | 1 | Magnetic | 0 | -16.6671709959 |
| 7 | 1 | Magnetic | 20.5528411205 | -0.612338098158 |
| 8 | 1 | Electric | 25.6057295537 | -1.0934061884 |
| 9 | 1 | Magnetic | -10.0504300118 | -0.320402672393 * |
|   |   |    |                      |                      |
|---|---|----|----------------------|----------------------|
| 10| 2 | Electric | 27.6192891874       | -8.90198711517      |
| 11| 2 | Electric | -27.6192891874      | -8.90198711517      |
| 12| 2 | Electric | 0                   | -22.3964044932      |
| 13| 1 | Electric | -25.6057295537      | -1.09340061884      |
| 14| 1 | Magnetic | -20.5528411205      | -0.612338098158      |
| 15| 2 | Electric | 29.4202122895       | -1.30013922068      |
| 16| 2 | Electric | 18.3664561787       | -0.157910574956      |
| 17| 1 | Magnetic | 31.1095765079       | -0.728056548015      |
| 18| 2 | Electric | -29.4202122895      | -1.30013922068      |
| 19| 1 | Electric | 36.3026590262       | -0.97342373274      |
| 20| 1 | Magnetic | -31.1095765079      | -0.728056548015      |
| 21| 1 | Magnetic | -36.3026590262      | -0.97342373274      |
| 22| 2 | Electric | -18.3664561787      | -0.157910574956      |
| 23| 1 | Magnetic | 41.6436391548       | -0.77801924353      |
| 24| 2 | Magnetic | 11.6068458386       | -23.3678704607      |
| 25| 1 | Magnetic | -41.6436391548      | -0.77801924353      |
| 26| 1 | Electric | 46.8678200513       | -0.92423467398      |
| 27| 1 | Electric | -46.8678200513      | -0.92423467398      |
| 28| 1 | Magnetic | 52.1586779719       | -0.80316557498      |
| 29| 2 | Magnetic | 40.87657218         | -1.22185932651      |
| 30| 1 | Magnetic | -52.1586779719      | -0.80316557498      |
| 31| 2 | Magnetic | 25.2384148355       | -0.347671357336      |
| 32| 2 | Electric | -40.87657218        | -1.22185932651      |
| 33| 1 | Electric | 57.3922051643       | -0.899761721426      |
| 34| 3 | Electric | 41.3784410979       | -10.3704881369      |
| 35| 1 | Magnetic | 62.6614670594       | -0.81740493841      |
| 36| 2 | Magnetic | -11.6068458386      | -23.3678704607      |
| 37| 1 | Electric | -57.3922051643      | -0.899761721426      |
| 38| 3 | Electric | -41.3784410979      | -10.3704881369      |
| 39| 3 | Electric | 12.1702981961       | -29.8223199765      |
| 40| 1 | Magnetic | -62.6614670594      | -0.81740493841      |
| 41| 2 | Magnetic | -14.6095531088      | -0.0912033936173     |
| 42| 2 | Magnetic | -25.2384148355      | -0.347671357336      |
| 43| 1 | Electric | 67.8982181911       | -0.885849192354      |
| 44| 1 | Magnetic | 73.1563480037       | -0.826195948164      |
| 45| 2 | Magnetic | 14.6095531088       | -0.0912033936173     |
| 46| 2 | Magnetic | 35.8622134519       | -0.550619822585      |
| 47| 1 | Electric | -67.8982181911      | -0.885849192354      |
| 48| 1 | Magnetic | -73.1563480037      | -0.826195948164      |
| 49| 3 | Electric | -12.1702981961      | -29.8223199765      |
|   |   |               |               |
|---|---|---------------|---------------|
| 50| 2 | Electric      | Electric      |
| 51| 1 | Magnetic      | Magnetic      |
| 52| 1 | Electric      | Electric      |
| 53| 3 | Electric      | Electric      |
| 54| 2 | Magnetic      | Magnetic      |
| 55| 1 | Magnetic      | Magnetic      |
| 56| 1 | Electric      | Electric      |
| 57| 2 | Electric      | Electric      |
| 58| 3 | Electric      | Electric      |
| 59| 1 | Magnetic      | Magnetic      |
| 60| 1 | Electric      | Magnetic      |
| 61| 2 | Magnetic      | Magnetic      |
| 62| 3 | Electric      | Electric      |
| 63| 1 | Magnetic      | Magnetic      |
| 64| 1 | Electric      | Magnetic      |
| 65| 1 | Magnetic      | Magnetic      |
| 66| 3 | Electric      | Magnetic      |
| 67| 2 | Magnetic      | Magnetic      |
| 68| 1 | Electric      | Magnetic      |
| 69| 1 | Magnetic      | Magnetic      |
| 70| 1 | Electric      | Magnetic      |
| 71| 2 | Electric      | Magnetic      |
| 72| 1 | Magnetic      | Magnetic      |
| 73| 2 | Magnetic      | Magnetic      |
| 74| 1 | Magnetic      | Magnetic      |
| 75| 1 | Electric      | Magnetic      |
| 76| 2 | Electric      | Magnetic      |
| 77| 1 | Electric      | Magnetic      |
| 78| 1 | Magnetic      | Magnetic      |
| 79| 2 | Magnetic      | Magnetic      |
| 80| 1 | Magnetic      | Magnetic      |
| 81| 1 | Electric      | Magnetic      |
| 82| 1 | Magnetic      | Magnetic      |
| 83| 1 | Electric      | Magnetic      |
| 84| 2 | Magnetic      | Magnetic      |
| 85| 1 | Magnetic      | Magnetic      |
| 86| 2 | Electric      | Magnetic      |
| 87| 1 | Electric      | Magnetic      |
| 88| 1 | Magnetic      | Magnetic      |
| 89| 2 | Magnetic      | Magnetic      |
|   |   |   |   |   |
|---|---|---|---|---|
| 90| 1| Electric| -130.81394389| -0.860608534354 |
| 91| 2| Electric| -72.8269285735| -0.950625123536 |
| 92| 3| Electric| 22.6811477093| -0.0240972918528 |
| 93| 1| Magnetic| -146.532389482| -0.844963471673 |
| 94| 3| Magnetic| 0| -34.2921448694 |
| 95| 1| Electric| 141.292387085| -0.859287251104 |
| 96| 1| Magnetic| 157.009320538| -0.845785516948 |
| 97| 3| Electric| 56.1873880265| -1.31076800871 |
| 98| 2| Magnetic| 78.1250801034| -0.782954976588 |
| 99| 1| Electric| -141.292387085| -0.859287251104 |
|100| 1| Magnetic| -157.009320538| -0.845785516948 |
|101| 1| Magnetic| 167.485642694| -0.84645928014 |
|102| 1| Electric| 151.769916371| -0.858230780434 |
|103| 2| Magnetic| -78.1250801034| -0.782954976588 |
|104| 3| Electric| -56.1873880265| -1.31076800871 |
|105| 2| Electric| 83.3640004244| -0.925300938755 |
|106| 1| Magnetic| -167.485642694| -0.84645928014 |
|107| 1| Electric| -151.769916371| -0.858230780434 |
|108| 1| Magnetic| 177.961461155| -0.847018347667 |
|109| 1| Electric| 162.246713801| -0.857372764794 |
|110| 2| Magnetic| 88.6437818037| -0.798209825688 |
|111| 2| Electric| -83.3640004244| -0.925300938755 |
|112| 1| Magnetic| -177.961461155| -0.847018347667 |
|113| 1| Electric| -162.246713801| -0.857372764794 |
|114| 1| Magnetic| 188.436858313| -0.847487319306 |
|115| 2| Magnetic| -88.6437818037| -0.798209825688 |
|116| 1| Electric| 172.722915846| -0.85666412174 |
|117| 3| Electric| -22.6811477093| -0.0240972918528 |
|118| 1| Magnetic| -188.436858313| -0.847487319306 |
|119| 1| Electric| 172.722915846| -0.85666412174 |
|120| 4| Electric| 55.1479540673| -11.4660449677 |
|121| 1| Magnetic| 198.911899592| -0.84788454346 |
|122| 2| Electric| 93.8847532465| -0.908678135473 |
|123| 2| Magnetic| 99.1532484911| -0.808888436726 |
|124| 1| Electric| 183.198626881| -0.856077957335 |
|125| 1| Magnetic| -198.911899592| -0.84788454346 |
|126| 1| Electric| -183.198626881| -0.856077957335 |
|127| 2| Electric| -93.8847532465| -0.908678135473 |
|128| 1| Magnetic| 209.386637581| -0.848223929144 |
|129| 3| Magnetic| 23.4583180267| -27.9179633523 |
|   |   |   |   |   |
|---|---|---|---|---|
| 130 | 4 | Electric | -55.1479540673 | -11.4660449677 * |
| 131 | 2 | Magnetic | -99.1532484911 | -0.808888436726 * |
| 132 | 1 | Magnetic | -209.386637581 | -0.848223929144 * |
| 133 | 1 | Electric | 193.673928132 | -0.855582538462 |
| 134 | 3 | Magnetic | 29.8329637487 | -0.153405660149 |
| 135 | 1 | Electric | -193.673928132 | -0.85582538462 * |
| 136 | 1 | Magnetic | 219.861115029 | -0.848516174096 |
| 137 | 2 | Magnetic | 109.655905287 | -0.816647962003 |
| 138 | 1 | Magnetic | -219.861115029 | -0.848516174096 * |
| 139 | 3 | Magnetic | -23.4583180267 | -27.9179633523 * |
| 140 | 1 | Electric | 204.14888378 | -0.855161520466 |
| 141 | 2 | Electric | 104.394842868 | -0.897153754581 |
| 142 | 1 | Magnetic | 230.335367033 | -0.848769614366 |
| 143 | 1 | Electric | -204.14888378 | -0.855161520466 * |
| 144 | 2 | Electric | -108.655905287 | -0.816647962003 |
| 145 | 1 | Magnetic | -230.335367033 | -0.848769614366 * |
| 146 | 3 | Electric | 66.9826335393 | -1.14200655399 |
| 147 | 2 | Electric | -104.394842868 | -0.897153754581 * |
| 148 | 4 | Electric | 0 | -40.428156844 |
| 149 | 1 | Electric | 214.623545222 | -0.854800712487 |
| 150 | 1 | Magnetic | 240.809422673 | -0.848990822976 |
| 151 | 4 | Electric | 24.3081392072 | -35.2539906339 |
| 152 | 1 | Electric | -214.623545222 | -0.854800712487 * |
| 153 | 2 | Magnetic | 120.153420526 | -0.822461064223 |
| 154 | 1 | Magnetic | -240.809422673 | -0.848990822976 * |
| 155 | 3 | Magnetic | 40.5184841307 | -0.358315963597 |
| 156 | 1 | Electric | 225.097954115 | -0.854489153701 |
| 157 | 1 | Magnetic | 251.283306247 | -0.849185038852 |
| 158 | 3 | Electric | -66.9826335393 | -1.14200655399 * |
| 159 | 2 | Magnetic | -120.153420526 | -0.822461064223 * |
| 160 | 3 | Magnetic | 18.9230787987 | -0.02063480573 |
| 161 | 1 | Electric | -225.097954115 | -0.854489153701 * |
| 162 | 2 | Electric | 114.897512459 | -0.888821727399 |
| 163 | 1 | Magnetic | -251.283306247 | -0.849185038852 * |
| 164 | 3 | Magnetic | -29.8329637487 | -0.153405660149 * |
| 165 | 1 | Magnetic | 261.757038212 | -0.849356478841 |
| 166 | 1 | Electric | 235.572144581 | -0.854218269337 |
| 167 | 2 | Electric | -114.897512459 | -0.888821727399 * |
| 168 | 2 | Magnetic | 130.64696949 | -0.826927613568 |
| 169 | 1 | Electric | -235.572144581 | -0.854218269337 * |
|   |   |   |   |   |
|---|---|---|---|---|
| 170| 1| Magnetic | -261.757038212 | -0.849356478841 * |
| 171| 1| Magnetic | 272.23063591 | -0.849508567843 |
| 172| 1| Electric | 246.046144847 | -0.853981273287 |
| 173| 2| Magnetic | -130.64696949 | -0.826927613568 * |
| 174| 1| Magnetic | -272.23063591 | -0.849508567843 * |
| 175| 1| Electric | -246.046144847 | -0.853981273287 * |
| 176| 3| Magnetic | -40.5184841307 | -0.358315963597 * |
| 177| 1| Magnetic | 282.704114143 | -0.849644110717 |
| 178| 2| Electric | 125.394781468 | -0.882594604288 |
| 179| 1| Electric | 256.519978464 | -0.853772738238 |
| 180| 2| Magnetic | 141.137399863 | -0.83043359801 |
| 181| 1| Magnetic | -282.704114143 | -0.849644110717 * |
| 182| 3| Magnetic | 51.1821582854 | -0.519546404004 * |
| 183| 1| Electric | -256.519978464 | -0.853772738238 * |
| 184| 2| Electric | -24.3081392072 | -35.2539906339 * |
| 185| 1| Magnetic | 293.177485616 | -0.849765422197 |
| 186| 2| Magnetic | -141.137399863 | -0.83043359801 * |
| 187| 4| Electric | -24.3081392072 | -35.2539906339 |
| 188| 1| Electric | 266.993665239 | -0.853588281707 |
| 189| 4| Electric | 48.7141214168 | -0.760091510285 |
| 190| 1| Magnetic | -293.177485616 | -0.849765422197 * |
| 191| 1| Electric | -266.993665239 | -0.853588281707 * |
| 192| 1| Magnetic | 303.650761298 | -0.849874426139 |
| 193| 3| Magnetic | -18.9230787987 | -0.02063480573 |
| 194| 2| Magnetic | 151.625336564 | -0.833235323747 |
| 195| 1| Magnetic | -303.650761298 | -0.849874426139 * |
| 196| 1| Electric | 277.467221955 | -0.8534243359 |
| 197| 2| Electric | 135.8879838 | -0.877813843096 |
| 198| 1| Electric | -277.467221955 | -0.8534243359 * |
| 199| 1| Magnetic | 314.123950707 | -0.8499727321 |
| 200| 2| Magnetic | -151.625336564 | -0.833235323747 * |
| 201| 3| Electric | 77.6350812491 | -1.05125274723 |
| 202| 2| Electric | -135.8879838 | -0.877813843096 * |
| 203| 1| Magnetic | -314.123950707 | -0.8499727321 * |
| 204| 3| Magnetic | -51.1821582854 | -0.519546404004 * |
| 205| 1| Electric | 287.940662926 | -0.853277961887 |
| 206| 4| Electric | 60.2566278728 | -1.59739601074 |
| 207| 1| Magnetic | 324.597062142 | -0.850061694974 |
| 208| 1| Electric | -287.940662926 | -0.853277961887 * |
| 209| 2| Magnetic | 162.111249505 | -0.835510039164 |
| Line | Charge | Type   | X       | Y       | Value       |
|------|--------|--------|---------|---------|-------------|
| 210  | 1      | Magnetic | -324.597062142 | -0.850061694974 | *           |
| 211  | 4      | Electric  | -48.7141214168  | -0.760091510285 | *           |
| 212  | 1      | Electric  | 298.414000435   | -0.853146740551 |             |
| 213  | 1      | Magnetic  | 335.070102873   | -0.850142461839 |             |
| 214  | 3      | Electric  | -77.6350812491  | -1.05125274723  | *           |
| 215  | 1      | Electric  | -298.414000435  | -0.853146740551 | *           |
| 216  | 2      | Electric  | 146.378040688   | -0.874060986544 |             |
| 217  | 2      | Magnetic  | -162.111249505  | -0.835510039164 | *           |
| 218  | 3      | Magnetic  | 61.8171286218   | -0.621284257252 |             |
| 219  | 1      | Magnetic  | -335.07102873   | -0.850142461839 | *           |
| 220  | 1      | Electric  | 308.887245084   | -0.853028648198 |             |
| 221  | 1      | Magnetic  | 345.543079294   | -0.850216009053 |             |
| 222  | 2      | Electric  | -146.378040688  | -0.874060986544 | *           |
| 223  | 1      | Electric  | -308.887245084  | -0.853028648198 | *           |
| 224  | 4      | Electric  | -60.2566278728  | -1.59739601074  | *           |
| 225  | 2      | Magnetic  | 172.595498377   | -0.837381982209 |             |
| 226  | 1      | Magnetic  | -345.543079294  | -0.850216009053 | *           |
| 227  | 1      | Electric  | 319.360406072   | -0.8529198972   |             |
| 228  | 1      | Magnetic  | 356.015997051   | -0.850283171849 |             |
| 229  | 2      | Magnetic  | -172.595498377  | -0.837381982209 | *           |
| 230  | 1      | Electric  | -319.360406072  | -0.8529198972   | *           |
| 231  | 1      | Magnetic  | -356.015997051  | -0.850283171849 | *           |
| 232  | 2      | Electric  | 156.86561105    | -0.871059403457 |             |
| 233  | 1      | Magnetic  | 366.488861149   | -0.850344668118 |             |
| 234  | 1      | Electric  | 329.833491421   | -0.85282535054  |             |
| 235  | 3      | Magnetic  | -61.8171286218  | -0.621284252752 | *           |
| 236  | 2      | Magnetic  | 183.078362923   | -0.838940952755 |             |
| 237  | 1      | Magnetic  | -366.488861149  | -0.850344668118 | *           |
| 238  | 1      | Electric  | -329.833491421  | -0.85282535054  | *           |
| 239  | 2      | Electric  | -156.86561105   | -0.871059403457 | *           |
| 240  | 1      | Magnetic  | 376.961676041   | -0.85040117641  |             |
| 241  | 1      | Electric  | 340.306508156   | -0.852737470958 |             |
| 242  | 2      | Magnetic  | -183.078362923  | -0.838940952755 | *           |
| 243  | 1      | Magnetic  | -376.961676041  | -0.85040117641  | *           |
| 244  | 1      | Electric  | -340.306508156  | -0.852737470958 | *           |
| 245  | 1      | Magnetic  | 387.434445699   | -0.850453057749 |             |
| 246  | 2      | Electric  | 167.351179763   | -0.868620066629 |             |
| 247  | 1      | Electric  | 350.779462457   | -0.852657362716 |             |
| 248  | 3      | Magnetic  | 72.4196312955   | -0.684398441008 |             |
| 249  | 2      | Magnetic  | 193.560063834   | -0.840253048677 |             |
|   |   |   |   |   |
|---|---|---|---|---|
| 250 | 1 | Magnetic | -387.434445699 | -0.850453057749 | * |
| 251 | 1 | Electric | -350.779462457 | -0.852657362716 | * |
| 252 | 1 | Magnetic | 397.907173681 | -0.850500956135 | * |
| 253 | 2 | Electric | -167.351179763 | -0.868620066629 | * |
| 254 | 3 | Electric | 88.2291311953 | -0.997942393563 | * |
| 255 | 2 | Magnetic | -193.560063834 | -0.840253048677 | * |
| 256 | 1 | Electric | 361.252359785 | -0.852584123518 | * |
| 257 | 1 | Magnetic | -397.907173681 | -0.850500956135 | * |
| 258 | 1 | Electric | -361.252359785 | -0.852584123518 | * |
| 259 | 1 | Magnetic | 408.37986318 | -0.850545221412 | * |
| 260 | 2 | Magnetic | 204.040777469 | -0.841367794068 | * |
| 261 | 1 | Magnetic | -408.37986318 | -0.850545221412 | * |
| 262 | 1 | Electric | 371.725204978 | -0.852516989789 | * |
| 263 | 2 | Electric | 177.835112158 | -0.866610130142 | * |
| 264 | 1 | Magnetic | 418.852517073 | -0.850586211842 | * |
| 265 | 1 | Electric | -371.725204978 | -0.852516989789 | * |
| 266 | 3 | Magnetic | -72.4196312955 | -0.684398441008 | * |
| 267 | 3 | Electric | -88.2291311953 | -0.997942393563 | * |
| 268 | 2 | Magnetic | -204.040777469 | -0.841367794068 | * |
| 269 | 1 | Magnetic | -418.852517073 | -0.850586211842 | * |
| 270 | 2 | Electric | -177.835112158 | -0.866610130142 | * |
| 271 | 1 | Electric | 382.198002343 | -0.852455301193 | * |
| 272 | 1 | Magnetic | 429.325137957 | -0.850624242602 | * |
| 273 | 1 | Electric | -382.198002343 | -0.852455301193 | * |
| 274 | 1 | Magnetic | -429.325137957 | -0.850624242602 | * |
| 275 | 2 | Magnetic | 214.5206464 | -0.842322887046 | * |
| 276 | 1 | Electric | 392.670755725 | -0.8523984484324 | * |
| 277 | 1 | Magnetic | 439.797728181 | -0.850659591852 | * |
| 278 | 1 | Electric | -392.670755725 | -0.8523984484324 | * |
| 279 | 2 | Electric | 188.317689045 | -0.86493394945 | * |
| 280 | 3 | Magnetic | 82.9951829195 | -0.725129372852 | * |
| 281 | 2 | Magnetic | -214.5206464 | -0.842322887046 | * |
| 282 | 1 | Magnetic | -439.797728181 | -0.850659591852 | * |
| 283 | 4 | Electric | 38.0880907322 | -0.100710412439 | * |
| 284 | 1 | Magnetic | 403.143468565 | -0.852346039325 | * |
| 285 | 1 | Electric | 450.270289877 | -0.850692505835 | * |
| 286 | 2 | Electric | -188.317689045 | -0.86493394945 | * |
| 287 | 1 | Electric | -403.143468565 | -0.852346039325 | * |
| 288 | 1 | Magnetic | -450.270289877 | -0.850692505835 | * |
| 289 | 2 | Magnetic | 224.9997871 | -0.843147433672 | * |
|   |   |   |   |   |
|---|---|---|---|---|
| 290 | 1 | Magnetic | 460.742824987 | -0.850723203167 |
| 291 | 1 | Electric | 413.616143955 | -0.852297528847 |
| 292 | 1 | Magnetic | -460.742824987 | -0.850723203167 * |
| 293 | 1 | Electric | -413.616143955 | -0.852297528847 * |
| 294 | 2 | Magnetic | -224.9997871 | -0.843147433672 * |
| 295 | 2 | Electric | 198.799130011 | -0.863521203234 |
| 296 | 1 | Magnetic | 471.21535276 | -0.850751878477 |
| 297 | 3 | Magnetic | -82.9951829195 | -0.725129372852 * |
| 298 | 1 | Electric | 424.088784681 | -0.852252568901 |
| 299 | 1 | Magnetic | -471.21535276 | -0.850751878477 * |
| 300 | 2 | Magnetic | 235.478295636 | -0.843864195355 |
| 301 | 1 | Electric | -424.088784681 | -0.852252568901 * |
| 302 | 2 | Electric | -198.799130011 | -0.863521203234 * |
| 303 | 1 | Magnetic | 481.68782236 | -0.850778705498 |
| 304 | 1 | Electric | 434.561393259 | -0.852210821227 |
| 305 | 3 | Electric | 98.7915313344 | -0.963895821236 |
| 306 | 1 | Magnetic | -481.68782236 | -0.850778705498 * |
| 307 | 2 | Magnetic | -235.478295636 | -0.843864195355 * |
| 308 | 1 | Electric | -434.561393259 | -0.852210821227 * |
| 309 | 1 | Magnetic | 492.160287715 | -0.850803839698 |
| 310 | 2 | Electric | 209.279609354 | -0.862319227876 |
| 311 | 1 | Electric | 445.033971965 | -0.852171986915 |
| 312 | 1 | Magnetic | -492.160287715 | -0.850803839698 * |
| 313 | 2 | Magnetic | 245.956251934 | -0.84449117919 |
| 314 | 3 | Magnetic | 93.5502082347 | -0.752675593681 |
| 315 | 1 | Electric | -445.033971965 | -0.852171986915 * |
| 316 | 1 | Magnetic | 502.632732698 | -0.85082742054 |
| 317 | 3 | Electric | -98.7915313344 | -0.963895821236 * |
| 318 | 2 | Electric | -209.279609354 | -0.862319227876 * |
| 319 | 1 | Magnetic | -502.632732698 | -0.85082742054 * |
| 320 | 1 | Electric | 455.506522867 | -0.852135801034 |
| 321 | 2 | Magnetic | -245.956251934 | -0.84449117919 * |
| 322 | 1 | Electric | -455.506522867 | -0.852135801034 * |
| 323 | 4 | Electric | -38.0880907322 | -0.100710412439 * |
| 324 | 1 | Magnetic | 513.105158551 | -0.850849573418 |
| 325 | 1 | Magnetic | -513.105158551 | -0.850849573418 * |
| 326 | 2 | Magnetic | 256.433723024 | -0.845042781916 |
| 327 | 1 | Electric | 465.979047846 | -0.852102028098 |
| 328 | 2 | Electric | 219.759267254 | -0.861287935865 |
| 329 | 1 | Magnetic | 523.57756642 | -0.850870411323 |
| Row | Value 1 | Value 2 | Value 3 | Value 4 | Value 5 |
|-----|---------|---------|---------|---------|---------|
| 330 | 1       | Electric| -465.979047846 | -0.852102028098 | *       |
| 331 | 3       | Magnetic| -93.5502082347 | -0.752675593681 | *       |
| 332 | 1       | Magnetic| -523.57756642  | -0.850870411323 | *       |
| 333 | 2       | Magnetic| -256.433723024 | -0.845042781916 | *       |
| 334 | 2       | Electric| -219.759267254 | -0.861287935865 | *       |
| 335 | 1       | Electric| 476.451548615  | -0.85207045823  | *       |
| 336 | 4       | Electric| 71.515580726   | -1.37802970433  | *       |
| 337 | 1       | Magnetic| 534.049957362  | -0.850890036293 | *       |
| 338 | 1       | Electric| -476.451548615 | -0.85207045823  | *       |
| 339 | 1       | Magnetic| -534.049957362 | -0.850890036293 | *       |
| 340 | 2       | Magnetic| 266.910765533  | -0.845530625139 | *       |
| 341 | 1       | Electric| 486.924026743  | -0.852040903883 | *       |
| 342 | 1       | Magnetic| 544.522332349  | -0.85098540656  | *       |
| 343 | 1       | Electric| -486.924026743 | -0.852040903883 | *       |
| 344 | 2       | Electric| 230.238217775  | -0.860396366372 | *       |
| 345 | 1       | Magnetic| -544.522332349 | -0.85098540656  | *       |
| 346 | 2       | Magnetic| -266.910765533 | -0.845530625139 | *       |
| 347 | 3       | Magnetic| 104.08982131   | -0.77210498393  | *       |
| 348 | 1       | Electric| 497.396483662  | -0.852013197055 | *       |
| 349 | 1       | Magnetic| 554.994692285  | -0.850926008121 | *       |
| 350 | 2       | Electric| -230.238217775 | -0.860396366372 | *       |
| 351 | 1       | Electric| -497.396483662 | -0.852013197055 | *       |
| 352 | 1       | Magnetic| -554.994692285 | -0.850926008121 | *       |
| 353 | 2       | Magnetic| 277.387427624  | -0.845694173497 | *       |
| 354 | 1       | Magnetic| 565.467038002  | -0.85094251725  | *       |
| 355 | 1       | Electric| 507.868920689  | -0.851987186891 | *       |
| 356 | 3       | Electric| 109.334043157  | -0.94073673706  | *       |
| 357 | 4       | Electric| -71.515580726  | -1.37802970433  | *       |
| 358 | 1       | Magnetic| -565.467038002 | -0.85094251725  | *       |
| 359 | 1       | Electric| -507.868920689 | -0.851987186891 | *       |
| 360 | 2       | Magnetic| -277.387427624 | -0.845694173497 | *       |
| 361 | 4       | Magnetic| 11.6024116522  | -41.957948236   | *       |
| 362 | 2       | Electric| 240.716554709  | -0.859620293949 | *       |
| 363 | 1       | Magnetic| 575.939370276  | -0.85098129963  | *       |
| 364 | 1       | Electric| 518.341339032  | -0.851962737627 | *       |
| 365 | 3       | Magnetic| -104.08982131  | -0.77210498393  | *       |
| 366 | 1       | Magnetic| -575.939370276 | -0.85098129963  | *       |
| 367 | 2       | Electric| -240.716554709 | -0.859620293949 | *       |
| 368 | 1       | Electric| -518.341339032 | -0.851962737627 | *       |
| 369 | 2       | Magnetic| 287.863750517  | -0.846351197923 | *       |
| Index | Charge | Type     | X-Coordinate   | Y-Coordinate   | Status |
|-------|--------|----------|----------------|----------------|--------|
| 370   | 1      | Magnetic | 586.411689826  | -0.850972916012 |        |
| 371   | 3      | Electric | -109.334043157 | -0.940733673706 | *      |
| 372   | 1      | Electric | 528.813739803  | -0.851939726811 |        |
| 373   | 1      | Magnetic | -586.411689826 | -0.850972916012 | *      |
| 374   | 2      | Magnetic | -287.863750517 | -0.846351197923 | *      |
| 375   | 1      | Electric | -528.813739803 | -0.851939726811 | *      |
| 376   | 1      | Magnetic | 596.883997319  | -0.85096931368  |        |
| 377   | 2      | Electric | 251.194355901  | -0.858940539241 |        |
| 378   | 1      | Electric | 539.28612403   | -0.85191804377  |        |
| 379   | 1      | Magnetic | -596.883997319 | -0.85096931368  | *      |
| 380   | 2      | Magnetic | 298.339769694  | -0.846698126837 |        |
| 381   | 1      | Electric | -539.28612403  | -0.85191804377  |        |
| 382   | 3      | Magnetic | 114.617762139  | -0.786303808998 |        |
| 383   | 1      | Magnetic | 607.356293379  | -0.85100022841 | *      |
| 384   | 2      | Electric | -251.194355901 | -0.858940539241 | *      |
| 385   | 1      | Magnetic | -607.356293379 | -0.85100022841 | *      |
| 386   | 1      | Electric | 549.75849266   | -0.851897588274 |        |
| 387   | 2      | Magnetic | -298.339769694 | -0.846698126837 |        |
| 388   | 1      | Magnetic | 617.828578585  | -0.85101285392 | *      |
| 389   | 1      | Electric | -549.75849266  | -0.851897588274 | *      |
| 390   | 1      | Magnetic | -617.828578585 | -0.85101285392 | *      |
| 391   | 1      | Electric | 560.230846568  | -0.851878269374 |        |
| 392   | 2      | Magnetic | 308.815515864  | -0.847010315208 |        |
| 393   | 2      | Electric | 261.67168617   | -0.858341755204 |        |
| 394   | 1      | Magnetic | 628.30085348   | -0.851024856587 |        |
| 395   | 1      | Electric | -560.230846568 | -0.851878269374 | *      |
| 396   | 1      | Magnetic | -628.30085348  | -0.851024856587 | *      |
| 397   | 3      | Magnetic | -114.617762139 | -0.786303808998 | *      |
| 398   | 2      | Magnetic | -114.617762139 | -0.786303808998 | *      |
| 399   | 4      | Magnetic | -11.6024116522 | -41.9575948236 | *      |
| 400   | 2      | Magnetic | -308.815515864 | -0.847010315208 | *      |
| 401   | 1      | Electric | 570.703186568  | -0.851860004394 |        |
| 402   | 1      | Magnetic | 638.773118571  | -0.851036272668 |        |
| 403   | 1      | Electric | -570.703186568 | -0.851860004394 | *      |
| 404   | 1      | Magnetic | -638.773118571 | -0.851036272668 | *      |
| 405   | 2      | Magnetic | 319.291015735  | -0.847292252736 |        |
| 406   | 1      | Electric | 581.175513413  | -0.851842718039 |        |
| 407   | 1      | Magnetic | 649.24537433   | -0.851047141059 |        |
| 408   | 2      | Electric | 272.148601533  | -0.857811541512 |        |
| 409   | 3      | Electric | 119.862935155  | -0.924203799288 |        |
| Row | Type   | X-coordinate | Y-coordinate | Value                     | *   |
|-----|--------|--------------|--------------|---------------------------|-----|
| 410 | Electric | -581.175513413 | -0.851842718039 | *                         |     |
| 411 | Magnetic | -649.24537433  | -0.851047141059 | *                         |     |
| 412 | Magnetic | -319.291015735 | -0.847292252736 | *                         |     |
| 413 | Magnetic | 659.717621201  | -0.851057496237 | *                         |     |
| 414 | Electric | -272.148601533 | -0.857811541512 | *                         |     |
| 415 | Electric | 591.647827803  | -0.851826341622 | *                         |     |
| 416 | Magnetic | 125.136725693  | -0.796991290463 | *                         |     |
| 417 | Magnetic | -659.717621201 | -0.851057496237 | *                         |     |
| 418 | Electric | -591.647827803 | -0.851826341622 | *                         |     |
| 419 | Magnetic | 329.766292646  | -0.847547726397 | *                         |     |
| 420 | Magnetic | 670.189859601  | -0.851067370012 | *                         |     |
| 421 | Electric | -119.862935155 | -0.924203799288 | *                         |     |
| 422 | Electric | 602.120130388  | -0.851810812378 | *                         |     |
| 423 | Magnetic | -670.189859601 | -0.851067370012 | *                         |     |
| 424 | Electric | -602.120130388 | -0.851810812378 | *                         |     |
| 425 | Electric | 282.625147656  | -0.857339789318 | *                         |     |
| 426 | Magnetic | -329.766292646 | -0.847547726397 | *                         |     |
| 427 | Electric | 680.662089921  | -0.851076791763 |                          |     |
| 428 | Electric | 612.592421775  | -0.851796072861 |                          |     |
| 429 | Magnetic | -680.662089921 | -0.851076791763 | *                         |     |
| 430 | Electric | -282.625147656 | -0.857339789318 | *                         |     |
| 431 | Electric | -612.592421775 | -0.851796072861 | *                         |     |
| 432 | Magnetic | -125.136725693 | -0.796991290463 | *                         |     |
| 433 | Magnetic | 340.241367083  | -0.847779948446 |                          |     |
| 434 | Electric | 691.134312526  | -0.851085788666 |                          |     |
| 435 | Magnetic | -35.494617877 | -31.4677345069  |                          |     |
| 436 | Electric | 623.064702531  | -0.851782070414 |                          |     |
| 437 | Magnetic | -691.134312526 | -0.851085788666 | *                         |     |
| 438 | Magnetic | -340.241367083 | -0.847779948446 | *                         |     |
| 439 | Electric | -623.064702531 | -0.851782070414 | *                         |     |
| 440 | Magnetic | 701.606527762  | -0.851094385881 |                          |     |
| 441 | Electric | 293.101364828  | -0.856918190239 |                          |     |
| 442 | Magnetic | -701.606527762 | -0.851094385881 | *                         |     |
| 443 | Electric | 633.536973182  | -0.851768756698 |                          |     |
| 444 | Magnetic | 350.716257097  | -0.847991658014 |                          |     |
| 445 | Electric | -633.536973182 | -0.851768756698 | *                         |     |
| 446 | Electric | -293.101364828 | -0.856918190239 | *                         |     |
| 447 | Magnetic | 712.078735953  | -0.851102606737 |                          |     |
| 448 | Magnetic | 135.64866827  | -0.805237088842 |                          |     |
| 449 | Magnetic | -712.078735953 | -0.851102606737 | *                         |     |
|   |   |   |   |   |
|---|---|---|---|---|
| 450| 1| Electric| 644.009234223| -0.851756087272 |
| 451| 2| Magnetic| -350.716257097| -0.847991658014 * |
| 452| 1| Magnetic| 722.550937406| -0.851110472884 |
| 453| 1| Electric| -644.009234223| -0.851756087272 * |
| 454| 5| Electric| 68.9196287483| -12.3341283226 |
| 455| 1| Magnetic| -722.550937406| -0.851110472884 * |
| 456| 2| Electric| 303.577287412| -0.856539864068 |
| 457| 1| Electric| 654.481486116| -0.851744021221 |
| 458| 2| Magnetic| 361.190978659| -0.84818520235 |
| 459| 1| Magnetic| 733.023132409| -0.851118004434 |
| 460| 1| Electric| -654.481486116| -0.851744021221 * |
| 461| 3| Electric| 130.381968208| -0.911960452604 |
| 462| 2| Electric| -303.577287412| -0.856539864068 * |
| 463| 1| Magnetic| -733.023132409| -0.851118004434 * |
| 464| 1| Electric| 664.953729294| -0.851732520831 |
| 465| 2| Magnetic| -361.190978659| -0.84818520235 * |
| 466| 3| Magnetic| -135.64866827| -0.805237088842 * |
| 467| 1| Magnetic| 743.495321234| -0.85112520831 |
| 468| 1| Electric| -664.953729294| -0.851732520831 * |
| 469| 1| Magnetic| -743.495321234| -0.85112520831 * |
| 470| 2| Magnetic| 371.66554595| -0.848362602236 |
| 471| 1| Electric| 675.425964162| -0.851721551285 |
| 472| 3| Electric| -130.381968208| -0.911960452604 * |
| 473| 1| Magnetic| 753.967504139| -0.851132137299 |
| 474| 2| Electric| 314.052945134| -0.856199073453 |
| 475| 1| Electric| -675.425964162| -0.851721551285 * |
| 476| 1| Magnetic| -753.967504139| -0.851132137299 * |
| 477| 4| Magnetic| 35.4946178773| -31.4677345069 |
| 478| 2| Electric| -314.052945134| -0.856199073453 * |
| 479| 2| Magnetic| -371.66554595| -0.848362602236 * |
| 480| 1| Magnetic| 764.439681366| -0.851138772269 |
| 481| 1| Electric| 685.898191103| -0.851711080409 |
| 482| 5| Electric| -68.9196287483| -12.3341283226 * |
| 483| 1| Magnetic| -764.439681366| -0.851138772269 * |
| 484| 1| Electric| -685.898191103| -0.851711080409 * |
| 485| 3| Magnetic| 146.155030909| -0.81173201949 |
| 486| 4| Electric| 82.3228218899| -1.20281231878 |
| 487| 2| Magnetic| 382.139971602| -0.848525605011 |
| 488| 1| Magnetic| 774.911853145| -0.851145140155 |
| 489| 1| Electric| 696.370410473| -0.851701078425 |
3. Modes of the silicon sphere used in Fig. 4

The following Table details the 650 QNMs of the silicon sphere (radius $R = 75$ nm and permittivity given by the Lorentz model in the main text) that have been used in Fig. 4 to test the convergence of the QNM expansion. The modes are sorted in descending order according to their contribution to the extinction cross-section at $k_0 = 10.267 \, \mu m^{-1}$. The first column of Table S2 contains the number of the modes in the sorted list. These 650 QNMs have a contribution to the cross-section larger than $5 \times 10^{-11}$.

The list includes 164 electric modes with $l = 1$ (83 in the 4\textsuperscript{th} quadrant and 81 in the 3\textsuperscript{rd} quadrant), 155 magnetic modes with $l = 1$ (79 in the 4\textsuperscript{th} quadrant and 76 in the 3\textsuperscript{rd} quadrant), 113 electric modes with $l = 2$ (58 in the 4\textsuperscript{th} quadrant and 55 in the 3\textsuperscript{rd} quadrant), 109 magnetic modes with $l = 2$ (57 in the 4\textsuperscript{th} quadrant and 52 in the 3\textsuperscript{rd} quadrant), 46 electric modes with $l = 3$ (24 in the 4\textsuperscript{th} quadrant and 22 in the 3\textsuperscript{rd} quadrant), 42 magnetic modes with $l = 3$ (22 in the 4\textsuperscript{th} quadrant and 20 in the 3\textsuperscript{rd} quadrant), 11 electric modes with $l = 4$ (6 in the 4\textsuperscript{th} quadrant and 5 in the 3\textsuperscript{rd} quadrant), 8 magnetic modes with $l = 4$ (4 in the 4\textsuperscript{th} quadrant and 4 in the 3\textsuperscript{rd} quadrant), 2 electric modes with $l = 5$ (1 in the 4\textsuperscript{th} quadrant and 1 in the 3\textsuperscript{rd} quadrant), and 0 magnetic modes with $l = 5$.

| #  | $l$ | Polarization | $\text{Re}(\tilde{\omega}_m)/c$ ($\mu m^{-1}$) | $\text{Im}(\tilde{\omega}_m)/c$ ($\mu m^{-1}$) |
|----|----|--------------|---------------------------------|---------------------------------|
| 490 | 1  | Magnetic     | -774.911853145                 | -0.851145140155                |
| 491 | 2  | Electric     | 324.528363842                  | -0.8589103041                  |
| 492 | 1  | Electric     | -696.370410473                 | -0.851701078425                |
| 493 | 2  | Magnetic     | -382.139971602                 | -0.848525605011                |
| 494 | 1  | Magnetic     | 785.384019694                  | -0.851512551                   |
| 495 | 1  | Electric     | 706.84262261                   | -0.85169151775                 |
| 496 | 2  | Electric     | -324.528363842                 | -0.8589103041                  |
| 497 | 1  | Magnetic     | -785.384019694                 | -0.851512551                   |
| 498 | 1  | Electric     | -706.84262261                  | -0.85169151775                 |
| 499 | 1  | Magnetic     | 795.85618122                   | -0.851157130326                |
| 500 | 2  | Magnetic     | 392.614266909                  | -0.848675727806                |

Table S2. List of the 650 QNMs used in Fig. 4 to test the convergence of the QNM expansion in the case of the silicon sphere (Lorentz model of the refractive index).

First column: mode number in the sorted expansion. Second column: degree $l$. Third column: polarization, electric (TE) or magnetic (TM). Fourth column: real part of the eigenfrequency. Fifth column: imaginary part (negative) of the eigenfrequency. Sixth column: the modes marked with a star '*' belong to the 3\textsuperscript{rd} quadrant of the complex plane; the modes without marker belong to the 4\textsuperscript{th} quadrant.
|   |    |        |           |           |
|---|----|--------|-----------|-----------|
| 6 | 1  | Electric | -13.9936274725 | -6.21813615152 |
| 7 | 2  | Electric | 28.0516623607  | -2.03536743662 |
| 8 | 1  | Magnetic | 0          | -17.4258472196 |
| 9 | 1  | Electric | 25.7762681898  | -1.83031322965 |
|10 | 1  | Electric | -13.0057081538 | -0.464620084  |
|11 | 2  | Electric | 29.9041973757  | -8.39563706891 |
|12 | 2  | Electric | -29.9041973757 | -8.39563706891 |
|13 | 2  | Electric | -28.0516623607 | -2.03536743662 |
|14 | 2  | Electric | 19.8729482434  | -0.439216532289 |
|15 | 1  | Magnetic | 31.522512954  | -1.38278610462 |
|16 | 1  | Magnetic | -22.6185222662 | -0.943950384252 |
|17 | 2  | Electric | 0          | -22.7680841557 |
|18 | 1  | Magnetic | 22.6185222662 | -0.943950384252 |
|19 | 2  | Electric | -19.8729482434 | -0.439216532289 |
|20 | 1  | Magnetic | -31.522512954 | -1.38278610462 |
|21 | 1  | Magnetic | -10.2690458378 | -0.315616269828 |
|22 | 1  | Electric | -25.7762681898 | -1.83031322965 |
|23 | 1  | Magnetic | 44.5786361289  | -1.52320964614 |
|24 | 1  | Electric | -37.7444922909 | -1.84935910418 |
|25 | 1  | Electric | 15.817182288  | -0.229808270108 |
|26 | 1  | Magnetic | -44.5786361289 | -1.52320964614 |
|27 | 1  | Electric | 37.7444922909 | -1.84935910418 |
|28 | 1  | Magnetic | 15.1530515531  | -0.211212055324 |
|29 | 1  | Magnetic | 58.464159642   | -1.57115639482 |
|30 | 2  | Magnetic | 11.8682256568  | -24.3571408967 |
|31 | 1  | Electric | -51.430686414  | -1.76016633061 |
|32 | 1  | Magnetic | -58.464159642  | -1.57115639482 |
|33 | 1  | Electric | -15.817182288 | -0.229808270108 |
|34 | 3  | Electric | 43.5251279957  | -9.85376515368 |
|35 | 1  | Electric | 51.430686414   | -1.76016633061 |
|36 | 1  | Magnetic | 72.5817250969  | -1.59328085052 |
|37 | 2  | Electric | -43.3132292315 | -2.32643061275 |
|38 | 2  | Magnetic | 13.2698373804  | -0.11827826599 |
|39 | 2  | Electric | 43.3132292315  | -2.32643061275 |
|40 | 2  | Magnetic | -11.8682256568 | -24.3571408967 |
|41 | 3  | Electric | -43.5251279957 | -9.85376515368 |
|42 | 2  | Magnetic | 36.9133365905  | -1.12036130524 |
|43 | 1  | Magnetic | -15.1530515531 | -0.211212055324 |
|44 | 1  | Magnetic | -72.5817250969 | -1.59328085052 |
|45 | 1  | Electric | -65.4845325165  | -1.71313908677 |
|   |   |   |   |   |
|---|---|---|---|---|
|46 | 2 | Magnetic | -25.2066993972 | -0.691448107586 * |
|47 | 3 | Electric | 12.3985655458 | -30.2230135659 |
|48 | 1 | Magnetic | 86.7935525506 | -1.60532629817 |
|49 | 2 | Magnetic | -36.9133365905 | -1.12036130524 * |
|50 | 3 | Electric | 32.7192546332 | -0.63915640658 |
|51 | 3 | Electric | 20.2096772001 | -0.201106910394 |
|52 | 1 | Magnetic | -66.7935525506 | -1.60532629817 * |
|53 | 1 | Electric | 65.4845325165 | -1.71313908677 |
|54 | 1 | Electric | -79.6677445689 | -1.68756375646 * |
|55 | 3 | Electric | -12.3985655458 | -30.2230135659 * |
|56 | 3 | Electric | 48.1288373501 | -3.12906217323 |
|57 | 1 | Electric | 16.4358896858 | -0.195828561584 |
|58 | 1 | Magnetic | 101.052936299 | -1.61260779862 |
|59 | 2 | Magnetic | 50.7102648858 | -1.35466071916 |
|60 | 3 | Electric | -48.1288373501 | -3.12906217323 * |
|61 | 2 | Electric | 14.7285377552 | -0.136278232788 |
|62 | 1 | Magnetic | -101.052936299 | -1.61260779862 * |
|63 | 2 | Magnetic | 25.2066993972 | -0.691448107586 |
|64 | 3 | Electric | -32.7192546332 | -0.63915640658 * |
|65 | 1 | Electric | -93.9115790777 | -1.67239426397 * |
|66 | 2 | Magnetic | -13.2698373804 | -0.11827826599 * |
|67 | 2 | Magnetic | -50.7102648858 | -1.35466071916 * |
|68 | 1 | Magnetic | 115.33976891 | -1.61734348251 |
|69 | 1 | Magnetic | 16.2383670688 | -0.18782645367 |
|70 | 1 | Electric | 79.6677445689 | -1.68756375646 |
|71 | 2 | Electric | -57.6430471341 | -1.98180003033 * |
|72 | 1 | Magnetic | -115.33976891 | -1.61734348251 * |
|73 | 1 | Electric | -108.188913932 | -1.6627214717 * |
|74 | 1 | Magnetic | 129.643944977 | -1.6205933922 |
|75 | 2 | Magnetic | 64.8865953827 | -1.46338559055 |
|76 | 1 | Electric | -16.4358896858 | -0.195828561584 * |
|77 | 1 | Magnetic | -129.643944977 | -1.6205933922 * |
|78 | 1 | Electric | -122.486817146 | -1.6561943058 * |
|79 | 2 | Magnetic | -64.8865953827 | -1.46338559055 * |
|80 | 1 | Magnetic | 143.959811701 | -1.62292414089 |
|81 | 1 | Electric | 93.9115790777 | -1.67239426397 |
|82 | 1 | Magnetic | -143.959811701 | -1.62292414089 * |
|83 | 1 | Electric | -136.798303339 | -1.65158900569 * |
|84 | 1 | Magnetic | 158.283949978 | -1.6246876409 |
|85 | 2 | Magnetic | 79.1641804174 | -1.51962712404 |
|   |   | Electric   |        | Magnetic   |        |
|---|---|------------|--------|------------|--------|
| 86| 1 | 16.6622711336 | -0.191361698257 | -158.283949978 | -1.62464876409 |
| 87| 2 | -71.9571319791 | -1.8438105872* | 57.6430471341 | -1.98180003033 |
| 88| 3 | -20.2096772001 | -0.201106910394* | -79.1641804174 | -1.51962712404* |
| 89| 1 | -16.2383670688 | -0.187862433637* | 172.614165173 | -1.62596141417* |
| 90| 1 | -151.119251784 | -1.64822129997* | 108.188913932 | -1.66272142711 |
| 91| 1 | -151.119251784 | -1.64822129997* | -179.780029626 | -1.64372912821 |
| 92| 1 | 108.188913932 | -1.66272142711 | -179.780029626 | -1.64372912821 |
| 93| 1 | 172.614165173 | -1.62596141417* | -172.614165173 | -1.62596141417* |
| 94| 3 | 57.6430471341 | -1.98180003033 | 108.188913932 | -1.66272142711 |
| 95| 2 | -71.9571319791 | -1.8438105872* | 108.188913932 | -1.66272142711 |
| 96| 1 | -20.2096772001 | -0.201106910394* | 172.614165173 | -1.62596141417* |
| 97| 1 | -16.2383670688 | -0.187862433637* | 108.188913932 | -1.66272142711 |
| 98| 1 | -151.119251784 | -1.64822129997* | 120.287367797 | -1.6277949293 |
| 99| 2 | -151.119251784 | -1.64822129997* | 172.614165173 | -1.62596141417* |
| 100| 1 | 108.188913932 | -1.66272142711 | -179.780029626 | -1.64372912821 |
| 101| 1 | 172.614165173 | -1.62596141417* | -172.614165173 | -1.62596141417* |
| 102| 1 | 108.188913932 | -1.66272142711 | 172.614165173 | -1.62596141417* |
| 103| 1 | 201.287367797 | -1.6277949293 | 108.188913932 | -1.66272142711 |
| 104| 1 | -93.4789152356 | -1.55202890697* | 172.614165173 | -1.62596141417* |
| 105| 2 | -86.2853771159 | -1.77474094657* | 108.188913932 | -1.66272142711 |
| 106| 2 | -16.6622711336 | -0.191361698257 | -172.614165173 | -1.62596141417* |
| 107| 1 | -194.116953132 | -1.64218848221* | 108.188913932 | -1.66272142711 |
| 108| 1 | -201.287367797 | -1.6277949293 | -172.614165173 | -1.62596141417* |
| 109| 1 | 16.5789531652 | -0.187755502142 | 108.188913932 | -1.66272142711 |
| 110| 1 | 215.628582246 | -1.62844975764 | -172.614165173 | -1.62596141417* |
| 111| 3 | 23.7720388961 | -29.1288599178 | 108.188913932 | -1.66272142711 |
| 112| 2 | 107.810513852 | -1.57230637668 | -172.614165173 | -1.62596141417* |
| 113| 1 | 122.486817146 | -1.6561943058 | 120.287367797 | -1.6277949293 |
| 114| 1 | -208.456991816 | -1.64095376992* | 122.486817146 | -1.6561943058 |
| 115| 4 | 58.0283223382 | -11.1974424801 | -208.456991816 | -1.64095376992* |
| 116| 2 | 16.1697624444 | -0.174492757792 | 58.0283223382 | -11.1974424801 |
| 117| 1 | 229.972075974 | -1.62898584834 | -208.456991816 | -1.64095376992* |
| 118| 1 | -215.628582246 | -1.62844975764 | 58.0283223382 | -11.1974424801 |
| 119| 2 | -107.810513852 | -1.57230637668 | -215.628582246 | -1.62844975764 |
| 120| 1 | -16.6622711336 | -0.191361698257 | -107.810513852 | -1.57230637668 |
| 121| 2 | -100.623153468 | -1.73507632511 | -215.628582246 | -1.62844975764 |
| 122| 1 | -222.799525879 | -1.6399413735 | -100.623153468 | -1.73507632511 |
| 123| 4 | -58.0283223382 | -11.1974424801 | -222.799525879 | -1.6399413735 |
| 124| 1 | 244.317434353 | -1.6294302587 | -58.0283223382 | -11.1974424801 |
| 125| 3 | -63.6394581003 | -2.33460961578 | 244.317434353 | -1.6294302587 |
| 126| 4 | -58.0283223382 | -11.1974424801 | -63.6394581003 | -2.33460961578 |
|   |   |   |   |   |
|---|---|---|---|---|
| 126 | 1 | Magnetic | -229.972075974 | -1.62898584834 | * |
| 127 | 1 | Electric | 16.7705927861 | -0.190957916516 |
| 128 | 2 | Magnetic | 122.150975102 | -1.5858160296 |
| 129 | 1 | Electric | -237.144090453 | -1.63912083544 | * |
| 130 | 3 | Magnetic | 42.5151778193 | -0.798457144391 |
| 131 | 1 | Magnetic | 258.664338061 | -1.62980275746 |
| 132 | 2 | Electric | 86.2853771159 | -1.77474094657 |
| 133 | 1 | Magnetic | -244.317434353 | -1.6294302587 | * |
| 134 | 2 | Magnetic | -122.150975102 | -1.5858160296 | * |
| 135 | 3 | Electric | 63.6394581003 | -2.33460961578 |
| 136 | 4 | Electric | 20.3157747501 | -0.192366280184 |
| 137 | 2 | Magnetic | 15.8323698856 | -0.169231007033 |
| 138 | 1 | Electric | -251.490329863 | -1.63842992579 | * |
| 139 | 3 | Magnetic | -29.2633142696 | -0.335375255748 | * |
| 140 | 2 | Electric | -114.966816625 | -1.7101226078 | * |
| 141 | 2 | Electric | 71.9571319791 | -1.8438105872 |
| 142 | 1 | Magnetic | 273.012537084 | -1.63011805953 |
| 143 | 1 | Magnetic | -258.664338061 | -1.62980275746 | * |
| 144 | 2 | Magnetic | 136.496610312 | -1.59526219039 |
| 145 | 1 | Electric | -265.83796723 | -1.63784764459 | * |
| 146 | 3 | Magnetic | -42.5151778193 | -0.798457144391 | * |
| 147 | 1 | Electric | 136.798303339 | -1.65158900569 |
| 148 | 2 | Electric | 100.623153468 | -1.73507632511 |
| 149 | 2 | Magnetic | -15.8323698856 | -0.169231007033 | * |
| 150 | 4 | Electric | 52.1600588505 | -1.96442368803 |
| 151 | 4 | Electric | 24.6830963181 | -35.6570944855 |
| 152 | 1 | Magnetic | 287.361832802 | -1.6303873005 |
| 153 | 1 | Electric | -280.186783728 | -1.63735237397 | * |
| 154 | 2 | Magnetic | -136.496610312 | -1.59526219039 | * |
| 155 | 1 | Magnetic | -273.012537084 | -1.63011805953 | * |
| 156 | 4 | Electric | 0 | -40.878696576 |
| 157 | 1 | Magnetic | -16.5789531652 | -0.187755502142 | * |
| 158 | 1 | Magnetic | 301.712065387 | -1.6306190326 |
| 159 | 2 | Electric | -129.314255283 | -1.69337117046 | * |
| 160 | 1 | Electric | -294.536604082 | -1.63692761433 | * |
| 161 | 2 | Magnetic | 150.845511863 | -1.6021246939 |
| 162 | 2 | Electric | 114.966816625 | -1.7101226078 |
| 163 | 1 | Magnetic | -287.361832802 | -1.6303873005 | * |
| 164 | 3 | Magnetic | 56.7536291668 | -1.145860926 |
| 165 | 1 | Magnetic | 316.063104741 | -1.63081991183 |
|   |   | Type   | X         | Y         |   |
|---|---|--------|-----------|-----------|---|
|166| 1 | Electric | -308.887286217 | -1.63656059706 | * |
|167| 4 | Electric | -52.1600588505 | -1.96442368803 | * |
|168| 2 | Magnetic | -150.845511863 | -1.60212426939 | * |
|169| 1 | Magnetic | -301.712065387 | -1.6306190326 | * |
|170| 1 | Electric | -323.238713733 | -1.63624131668 | * |
|171| 1 | Magnetic | 330.414843868 | -1.6309518092 | * |
|172| 2 | Electric | -143.664234332 | -1.68156604068 | * |
|173| 2 | Electric | 129.314255283 | -1.69337117046 | |
|174| 1 | Magnetic | 16.7276641443 | -0.189114250648 | |
|175| 2 | Magnetic | 165.196602929 | -1.60726552488 | |
|176| 1 | Magnetic | -316.063104741 | -1.63081991183 | * |
|177| 1 | Electric | -337.590790341 | -1.63596184354 | * |
|178| 3 | Magnetic | -56.7536291668 | -1.145860926 | * |
|179| 4 | Electric | -24.6830963181 | -35.6570944855 | * |
|180| 1 | Magnetic | 344.767193952 | -1.63114901464 | |
|181| 1 | Electric | 16.8310096468 | -0.19124013227 | |
|182| 1 | Electric | -16.7705927861 | -0.190957916516 | * |
|183| 1 | Electric | -351.943435691 | -1.6357182791 | * |
|184| 2 | Magnetic | -165.196602929 | -1.60726552488 | * |
|185| 1 | Magnetic | -330.414843868 | -1.6309518092 | * |
|186| 1 | Magnetic | 359.120080639 | -1.63128477062 | |
|187| 2 | Electric | 143.664234332 | -1.68156604068 | |
|188| 2 | Electric | -158.015997805 | -1.67292625809 | * |
|189| 1 | Electric | -366.296582198 | -1.63549813691 | * |
|190| 2 | Magnetic | 179.549232495 | -1.61121682019 | |
|191| 1 | Magnetic | 373.473441203 | -1.63140517397 | |
|192| 1 | Magnetic | -344.767193952 | -1.63114901464 | * |
|193| 1 | Electric | 151.119251784 | -1.64822129997 | |
|194| 1 | Electric | -380.650172598 | -1.63530458516 | * |
|195| 2 | Electric | -16.1697862444 | -0.174492757792 | * |
|196| 3 | Magnetic | -23.7720388961 | -29.1288599178 | * |
|197| 3 | Electric | -78.256355097 | -2.03689134402 | * |
|198| 1 | Electric | 222.799525879 | -1.63994913735 | |
|199| 3 | Magnetic | 14.8060177365 | -0.13242277188 | |
|200| 1 | Electric | 208.456991816 | -1.64095376992 | |
|201| 3 | Magnetic | 71.1676040938 | -1.32758927489 | |
|202| 2 | Magnetic | -179.549232495 | -1.61121682019 | * |
|203| 1 | Electric | 237.144090453 | -1.63912083544 | |
|204| 2 | Electric | 158.015997805 | -1.67292625809 | |
|205| 1 | Magnetic | 387.827222353 | -1.63151245509 | |
|   |   |   |   |
|---|---|---|---|
| 206 | 2 | Electric | -172.369060962 | -1.66640874528 |
| 207 | 1 | Electric | -395.004158049 | -1.63513173243 |
| 208 | 1 | Magnetic | -359.120080639 | -1.6312877062 |
| 209 | 1 | Electric | 251.490329863 | -1.63842992579 |
| 210 | 1 | Electric | 194.116953132 | -1.64218848221 |
| 211 | 2 | Magnetic | -193.902984737 | -1.61431906489 |
| 212 | 1 | Electric | 265.83796723 | -1.63784764459 |
| 213 | 3 | Magnetic | -14.806177365 | -0.13242277188 |
| 214 | 1 | Electric | 265.358496632 | -1.63497673005 |
| 215 | 1 | Magnetic | 402.18137852 | -1.63160845358 |
| 216 | 1 | Magnetic | -373.473441203 | -1.63140517397 |
| 217 | 1 | Electric | 280.186783728 | -1.63735237397 |
| 218 | 2 | Electric | -172.369060962 | -1.66640874528 |
| 219 | 1 | Electric | -423.713152168 | -1.63483720288 |
| 220 | 3 | Magnetic | -71.1676040938 | -1.3275827489 |
| 221 | 2 | Electric | -186.723099795 | -1.66136846719 |
| 222 | 1 | Electric | 294.536604082 | -1.63692761433 |
| 223 | 1 | Magnetic | 416.535870501 | -1.63169469769 |
| 224 | 2 | Electric | 16.59466835 | -0.18341062566 |
| 225 | 2 | Magnetic | -193.902984737 | -1.6431906489 |
| 226 | 3 | Magnetic | 29.2633142696 | -0.33537525574 |
| 227 | 1 | Magnetic | -387.827222353 | -1.63151245509 |
| 228 | 1 | Electric | -438.068093261 | -1.6347115797 |
| 229 | 1 | Electric | 308.887286217 | -1.6366059706 |
| 230 | 2 | Magnetic | 208.257581872 | -1.6179927575 |
| 231 | 1 | Electric | 179.780029626 | -1.64372912821 |
| 232 | 1 | Magnetic | 430.890664386 | -1.6317246539 |
| 233 | 1 | Electric | 323.238713733 | -1.6362413668 |
| 234 | 1 | Electric | -452.423292539 | -1.63459691309 |
| 235 | 2 | Electric | 186.723099795 | -1.66136846719 |
| 236 | 1 | Magnetic | -402.18137852 | -1.63160845358 |
| 237 | 2 | Electric | -201.077889851 | -1.65738941341 |
| 238 | 4 | Electric | 38.034856355 | -0.19462687520 |
| 239 | 1 | Magnetic | 445.245730691 | -1.63184283208 |
| 240 | 1 | Electric | 337.590790341 | -1.63596184354 |
| 241 | 1 | Electric | -466.778726023 | -1.63449304035 |
| 242 | 2 | Magnetic | -208.257581872 | -1.6179927575 |
| 243 | 1 | Electric | 351.943435691 | -1.63571582791 |
| 244 | 2 | Magnetic | 222.612831306 | -1.61881335755 |
| 245 | 1 | Magnetic | -416.535870501 | -1.63169469769 |
| Page | Type   | X         | Y         | Notes |
|------|--------|-----------|-----------|-------|
| 246  | Magnetic | 459.601043658 | -1.63190670784 |   |
| 247  | Electric | -481.134372617 | -1.63439832144 | *   |
| 248  | Magnetic | 85.5998930955 | -1.4255245886 |   |
| 249  | Electric | 201.077889651 | -1.65738941341 |   |
| 250  | Electric | 366.296582198 | -1.63549813691 |   |
| 251  | Electric | -215.433270807 | -1.65419200387 | *   |
| 252  | Electric | -495.49021369 | -1.63431171176 | *   |
| 253  | Electric | 16.8682204581 | -0.191597926337 |   |
| 254  | Magnetic | -16.727641443 | -0.189114250648 | *   |
| 255  | Magnetic | 473.956580682 | -1.63196486709 |   |
| 256  | Magnetic | -430.890664386 | -1.63177246539 | *   |
| 257  | Magnetic | 380.650172598 | -1.63530458516 |   |
| 258  | Magnetic | -222.612831306 | -1.61881335755 | *   |
| 259  | Magnetic | 16.4387001252 | -0.18166315471 |   |
| 260  | Electric | -509.846232722 | -1.63423231157 | *   |
| 261  | Electric | 395.004158049 | -1.63513173243 |   |
| 262  | Magnetic | 236.968595273 | -1.62047125114 |   |
| 263  | Magnetic | 488.312321842 | -1.63201797209 |   |
| 264  | Magnetic | 16.805967146 | -0.19019431969 |   |
| 265  | Electric | 215.433270807 | -1.65419200387 |   |
| 266  | Magnetic | -445.245730691 | -1.63184283208 | *   |
| 267  | Magnetic | -85.5998930955 | -1.4255245886 | *   |
| 268  | Electric | -229.789125105 | -1.6518367635 | *   |
| 269  | Electric | -524.202415016 | -1.634193425 | *   |
| 270  | Electric | 409.358496632 | -1.63497673005 |   |
| 271  | Electric | -16.8310096468 | -0.19124013227 | *   |
| 272  | Magnetic | 502.668249517 | -1.63206659192 |   |
| 273  | Electric | -538.558747451 | -1.63409212844 | *   |
| 274  | Electric | 423.713152168 | -1.63483720288 |   |
| 275  | Magnetic | -459.601043658 | -1.63196070784 | *   |
| 276  | Electric | -92.7473247275 | -1.89927498425 | *   |
| 277  | Magnetic | -236.968595273 | -1.62047125114 | *   |
| 278  | Electric | 229.789125105 | -1.6518367635 |   |
| 279  | Magnetic | 517.024348057 | -1.63211121777 |   |
| 280  | Electric | -552.915218277 | -1.63403007984 | *   |
| 281  | Magnetic | 251.324772576 | -1.6218522871 |   |
| 282  | Electric | 438.068093261 | -1.63471115797 |   |
| 283  | Electric | -244.145364568 | -1.6494276313 | *   |
| 284  | Magnetic | -473.956580682 | -1.63196486709 | *   |
| 285  | Electric | -567.27181694 | -1.63397268073 | *   |
|   |   |   |   |
|---|---|---|---|
|286| Electric| 452.423292539| -1.63459691309|
|287| Magnetic| 531.380603521| -1.63215227539|
|288| Electric| 244.145364568| -1.64942776313|
|289| Magnetic| 100.023700972| -1.48308187213|
|290| Electric| -581.628533932| -1.633919478|
|291| Electric| 466.778726023| -1.63449304035|
|292| Magnetic| -488.312321842| -1.63201797209|
|293| Electric| -258.501921746| -1.64762513548|
|294| Magnetic| 545.737003445| -1.63219013528|
|295| Magnetic| -251.324772576| -1.6218522871|
|296| Magnetic| 265.681287168| -1.62301487301|
|297| Electric| -595.985360669| -1.63387007241|
|298| Electric| -38.034856355| -0.194626875201|
|299| Magnetic| 481.134372617| -1.63439832144|
|300| Magnetic| 560.093536652| -1.6322512106|
|301| Magnetic| -502.668249517| -1.6320659192|
|302| Electric| 495.49021369| -1.63431171176|
|303| Electric| -610.342289376| -1.63382411106|
|304| Electric| 258.501921746| -1.64762513548|
|305| Magnetic| -16.438700125| -0.18166315471|
|306| Magnetic| -272.858744149| -1.64610245405|
|307| Magnetic| -100.023700972| -1.48308187213|
|308| Electric| 509.846232722| -1.63423231157|
|309| Electric| -624.699312996| -1.63378128115|
|310| Magnetic| 574.450193092| -1.6322571645|
|311| Magnetic| -517.024348057| -1.6321121777|
|312| Magnetic| -265.681287168| -1.62301487301|
|313| Magnetic| 280.03808076| -1.62400278363|
|314| Electric| 524.202415016| -1.6341593425|
|315| Electric| -639.056425111| -1.63374130457|
|316| Electric| 272.858744149| -1.64610245405|
|317| Magnetic| 588.8069637| -1.63228757098|
|318| Electric| -287.215790304| -1.64480450317|
|319| Electric| 538.558747451| -1.63409212844|
|320| Electric| -653.413619867| -1.63370393341|
|321| Magnetic| -531.380603521| -1.63215227539|
|322| Magnetic| 603.163840282| -1.63231550486|
|323| Electric| 552.915218277| -1.6340307984|
|324| Electric| -667.770891917| -1.63366894611|
|325| Magnetic| 294.3951079| -1.62484935036|
| Row | Type     | X         | Y         |
|-----|----------|-----------|-----------|
| 326 | Electric | 287.21579 | -1.644805 |
| 327 | Magnetic | -280.03808| -1.624027 |
| 328 | Magnetic | -545.73700| -1.632190 |
| 329 | Electric | 567.27181 | -1.633972 |
| 330 | Electric | 16.89279  | -0.191912 |
| 331 | Electric | -682.12824| -1.633614 |
| 332 | Electric | -301.57303| -1.643689 |
| 333 | Magnetic | 617.52081 | -1.632341 |
| 334 | Magnetic | 114.43636 | -1.519583 |
| 335 | Magnetic | 92.74732  | -1.899275 |
| 336 | Electric | 581.62853 | -1.633919 |
| 337 | Electric | -107.19250| -1.823268 |
| 338 | Electric | -696.48564| -1.633605 |
| 339 | Magnetic | -560.09354| -1.633225 |
| 340 | Magnetic | 631.87788 | -1.632365 |
| 341 | Electric | 301.57302 | -1.643689 |
| 342 | Electric | 595.98536 | -1.633870 |
| 343 | Electric | -710.84312| -1.633576 |
| 344 | Electric | 308.75233 | -1.625580 |
| 345 | Electric | -315.93043| -1.642733 |
| 346 | Electric | 107.19250 | -1.823268 |
| 347 | Electric | -294.39510| -1.624849 |
| 348 | Electric | 646.23504 | -1.632388 |
| 349 | Electric | 610.34229 | -1.633824 |
| 350 | Electric | -725.20066| -1.633549 |
| 351 | Electric | -574.45019| -1.632257 |
| 352 | Magnetic | -114.43636| -1.519583 |
| 353 | Magnetic | 624.69931 | -1.633782 |
| 354 | Magnetic | 315.93043 | -1.642733 |
| 355 | Magnetic | -739.55825| -1.633523 |
| 356 | Magnetic | 660.59227 | -1.632409 |
| 357 | Magnetic | -330.28796| -1.641881 |
| 358 | Magnetic | 78.25636  | -2.036913 |
| 359 | Magnetic | -20.31578 | -0.192366 |
| 360 | Magnetic | 639.05642 | -1.633741 |
| 361 | Magnetic | -588.80696| -1.632287 |
| 362 | Magnetic | 16.72010  | -0.187558 |
| 363 | Magnetic | -753.91589| -1.633499 |
| 364 | Magnetic | 323.10972 | -1.626215 |
| 365 | Magnetic | 674.94957 | -1.632429 |
|   |   |   |   |
|---|---|---|---|
| 366 | 1 | Magnetic | 16.8523218056  -0.190956118328 |
| 367 | 2 | Electric  | -16.559466835  -0.183841062566   * |
| 368 | 1 | Electric  | 653.413619867   -1.63370393341   |
| 369 | 2 | Magnetic  | -308.752332602  -1.62558031505   * |
| 370 | 1 | Electric  | -16.8682204581  -0.191597926337   * |
| 371 | 1 | Electric  | -768.27395527   -1.63347637954   * |
| 372 | 2 | Electric  | 330.287969227   -1.64188179542   |
| 373 | 1 | Magnetic  | -603.163840282  -1.63231550486   * |
| 374 | 2 | Electric  | -344.645634467  -1.64114386018   * |
| 375 | 1 | Electric  | 667.770891917   -1.6336894611   |
| 376 | 1 | Magnetic  | 689.306952778   -1.63244810719   |
| 377 | 1 | Electric  | -782.631339108  -1.63345474927   * |
| 378 | 1 | Magnetic  | -16.8059647146  -0.190194831969   * |
| 379 | 3 | Electric  | 121.613968906   -1.77631885232   |
| 380 | 1 | Electric  | 682.128236365   -1.6336314418   |
| 381 | 3 | Magnetic  | 128.839440264   -1.54415588998   |
| 382 | 1 | Electric  | -796.989127597  -1.6334327725   * |
| 383 | 2 | Electric  | 337.467264607   -1.62677178016   |
| 384 | 1 | Magnetic  | 703.664396412   -1.6324560781   |
| 385 | 2 | Electric  | 344.645634467   -1.64114386018   |
| 386 | 1 | Magnetic  | -617.520815409  -1.632341513   * |
| 387 | 1 | Electric  | 696.485648721   -1.63360534935   |
| 388 | 2 | Electric  | -359.003407823  -1.64049321404   * |
| 389 | 2 | Magnetic  | -323.109725989  -1.62621581365   * |
| 390 | 1 | Electric  | -811.346958607  -1.6334148823   * |
| 391 | 1 | Magnetic  | 718.021901977   -1.63248206908   |
| 392 | 1 | Electric  | 710.843124859   -1.63357640117   |
| 393 | 1 | Electric  | -825.704829914  -1.63339648999  * |
| 394 | 1 | Magnetic  | -631.877882331  -1.63236576842  * |
| 395 | 2 | Electric  | 359.003407823   -1.64049321404   |
| 396 | 1 | Electric  | 725.20066098   -1.63354915489   |
| 397 | 3 | Electric  | -121.613968906  -1.77631885232   * |
| 398 | 1 | Magnetic  | 732.379465817   -1.6324975717   |
| 399 | 1 | Electric  | -840.062739447  -1.63337903257  * |
| 400 | 2 | Magnetic  | 351.824929202   -1.62726095687   |
| 401 | 2 | Electric  | -373.361276492  -1.63991659706  * |
| 402 | 3 | Magnetic  | -128.839440264  -1.54415588998  * |
| 403 | 3 | Electric  | 15.5468806302   -0.15366881659   |
| 404 | 1 | Electric  | 739.558253581   -1.6335234797   |
| 405 | 1 | Magnetic  | -646.235034904  -1.63238842513  * |
|   |   |   |   |   |
|---|---|---|---|---|
|406| 1| Electric|-854.420685276|-1.63336244768|*|
|407| 2| Magnetic|-337.467264607|-1.62677178016|*|
|408| 1| Magnetic|746.737084559|-1.63251218869|
|409| 2| Electric|373.361276492|-1.63991659706|
|410| 1| Electric|753.915899427|-1.6334992571|
|411| 1| Electric|-868.778665598|-1.6334667813|*|
|412| 2| Electric|-387.719229621|-1.63940317757|*|
|413| 4| Magnetic|11.7148302097|-43.0779611402|
|414| 1| Electric|165.447067083|-1.6456855089|
|415| 3| Electric|136.020910034|-1.74515529823|
|416| 1| Electric|768.273595527|-1.6347637954|
|417| 1| Magnetic|-660.592267517|-1.63240962061|*|
|418| 1| Magnetic|761.094755085|-1.6325259624|
|419| 1| Electric|-883.136678728|-1.6333167135|*|
|420| 2| Magnetic|366.182703816|-1.62769363204|
|421| 3| Electric|-15.5468806302|-0.153660881659|*|
|422| 1| Electric|782.631339108|-1.6345474927|
|423| 2| Electric|387.719229621|-1.63940317757|
|424| 1| Electric|-897.494723087|-1.6333173892|*|
|425| 1| Magnetic|775.452474511|-1.6325902447|
|426| 2| Electric|-402.077257955|-1.6389440369|*|
|427| 1| Electric|16.9098805539|-0.192166633221|
|428| 2| Magnetic|-351.824929202|-1.6276095687|*|
|429| 1| Magnetic|-674.949575041|-1.632497786|*|
|430| 3| Magnetic|143.234922213|-1.5614841123|
|431| 1| Electric|796.989127597|-1.6343427725|
|432| 1| Electric|-911.852797199|-1.63330375622|*|
|433| 1| Magnetic|789.810240162|-1.6325513581|
|434| 1| Electric|811.346958607|-1.6334148823|
|435| 1| Electric|-926.210899678|-1.63329076206|*|
|436| 2| Electric|402.077257955|-1.6389440369|
|437| 2| Magnetic|380.5405751|-1.6280781861|
|438| 1| Magnetic|-689.306952778|-1.63244810719|*|
|439| 2| Electric|-416.435353547|-1.6385177747|*|
|440| 1| Electric|825.704829914|-1.63339648999|
|441| 2| Magnetic|16.6631667819|-0.18647354679|
|442| 1| Magnetic|804.168049554|-1.63256303699|
|443| 1| Electric|-940.569029222|-1.63327835835|*|
|444| 1| Electric|840.062739447|-1.6337903257|
|445| 2| Magnetic|-366.182703816|-1.62769363204|*|
|   |   |   |   |   |
|---|---|---|---|---|
| 446 | 1 | Electric | -954.927184609 | -1.63326650985 |
| 447 | 2 | Electric | 416.435353547 | -1.63853177747 |
| 448 | 1 | Magnetic | -703.664396412 | -1.63246560781 |
| 449 | 1 | Magnetic | 818.525900379 | -1.63257410668 |
| 450 | 3 | Magnetic | -143.234922213 | -1.56148841123 |
| 451 | 1 | Electric | 854.420685276 | -1.6336244768 |
| 452 | 2 | Electric | -430.793509534 | -1.63816022146 |
| 453 | 3 | Electric | -136.020910034 | -1.74515529823 |
| 454 | 3 | Electric | 150.418083188 | -1.7233113287 |
| 455 | 1 | Electric | -969.285364687 | -1.63325518393 |
| 456 | 2 | Magnetic | 394.898531804 | -1.62842150106 |
| 457 | 1 | Electric | 868.778665598 | -1.6334667813 |
| 458 | 1 | Magnetic | 832.883790488 | -1.6325846088 |
| 459 | 1 | Electric | -983.643568376 | -1.6332435029 |
| 460 | 4 | Magnetic | -11.7148030297 | -43.0776911402 |
| 461 | 1 | Magnetic | -718.021901977 | -1.63248206908 |
| 462 | 2 | Electric | 430.793509534 | -1.63816022146 |
| 463 | 1 | Electric | 883.136678728 | -1.6333161735 |
| 464 | 2 | Electric | -445.151719961 | -1.637824177 |
| 465 | 1 | Electric | -998.001794653 | -1.6332398082 |
| 466 | 1 | Magnetic | 847.24171788 | -1.63259458153 |
| 467 | 2 | Magnetic | -380.5405751 | -1.6280781861 |
| 468 | 1 | Electric | 897.494723087 | -1.6331737892 |
| 469 | 1 | Magnetic | -732.379465817 | -1.6324975717 |
| 470 | 2 | Magnetic | 409.256564373 | -1.6287297093 |
| 471 | 1 | Magnetic | 861.599680684 | -1.6326045983 |
| 472 | 2 | Electric | 445.151719961 | -1.637824177 |
| 473 | 1 | Electric | 911.852797199 | -1.6333037562 |
| 474 | 3 | Magnetic | 157.62451788 | -1.5741750872 |
| 475 | 2 | Electric | -459.509979634 | -1.63751925507 |
| 476 | 1 | Electric | 926.210899678 | -1.6332907620 |
| 477 | 1 | Magnetic | -746.737084559 | -1.6325128869 |
| 478 | 1 | Magnetic | 875.957677157 | -1.6326130758 |
| 479 | 1 | Electric | 940.589029222 | -1.6332835835 |
| 480 | 2 | Magnetic | -394.898531804 | -1.62842150106 |
| 481 | 2 | Electric | 459.509979634 | -1.63751925507 |
| 482 | 1 | Electric | -16.8927923328 | -0.191911782094 |
| 483 | 2 | Magnetic | 423.61466464 | -1.62900623965 |
| 484 | 2 | Electric | -473.868284002 | -1.63724172484 |
| 485 | 1 | Magnetic | 890.315705664 | -1.63262165921 |
|   |   |   |   |   |
|---|---|---|---|---|
| 486 | 3 | Electric | 164.808289841 | -1.70736480214 |
| 487 | 1 | Electric | 954.927184609 | -1.63326650985 |
| 488 | 1 | Magnetic | -761.094755085 | -1.63252598624 |
| 489 | 1 | Magnetic | 16.8820629789 | -0.191492685791 |
| 490 | 1 | Electric | 969.285364687 | -1.63325518393 |
| 491 | 1 | Magnetic | 904.673764677 | -1.6326293711 |
| 492 | 3 | Magnetic | -157.624451788 | -1.57417508724 |
| 493 | 2 | Electric | 473.868284002 | -1.63724172484 |
| 494 | 3 | Electric | -150.418083188 | -1.7231132871 |
| 495 | 2 | Electric | -488.226629057 | -1.6369839865 |
| 496 | 1 | Electric | 983.643568376 | -1.63324435029 |
| 497 | 1 | Magnetic | -775.452474511 | -1.6325902447 |
| 498 | 2 | Magnetic | -409.256643737 | -1.6287297093 |
| 499 | 1 | Magnetic | 919.031852764 | -1.6326736471 |
| 500 | 2 | Magnetic | 437.972825579 | -1.6292563851 |
| 501 | 1 | Electric | 998.001794653 | -1.63323398082 |
| 502 | 2 | Electric | 488.226629057 | -1.6369839865 |
| 503 | 2 | Electric | -502.58501126 | -1.6367563971 |
| 504 | 1 | Magnetic | 933.389968579 | -1.63264507523 |
| 505 | 1 | Magnetic | -789.810240162 | -1.632513581 |
| 506 | 3 | Magnetic | 172.009299005 | -1.58374369188 |
| 507 | 1 | Magnetic | 947.748110859 | -1.63265218014 |
| 508 | 2 | Electric | 502.58501126 | -1.6367563971 |
| 509 | 2 | Magnetic | 452.331041111 | -1.62948306332 |
| 510 | 2 | Magnetic | -423.61466464 | -1.6290062396 |
| 511 | 2 | Electric | -516.943427472 | -1.63654378763 |
| 512 | 1 | Magnetic | -804.168049554 | -1.6325630369 |
| 513 | 3 | Electric | 179.193320234 | -1.69534567273 |
| 514 | 1 | Magnetic | 962.106278418 | -1.63265896932 |
| 515 | 1 | Magnetic | -16.8523218056 | -0.190956118328 |
| 516 | 1 | Electric | 16.9222503575 | -0.192369906962 |
| 517 | 2 | Magnetic | -16.6631067819 | -0.18647345679 |
| 518 | 2 | Electric | 516.943427472 | -1.63654378763 |
| 519 | 1 | Magnetic | -818.525900379 | -1.63257410669 |
| 520 | 2 | Electric | -531.301874898 | -1.6363809797 |
| 521 | 1 | Magnetic | 976.464470138 | -1.63266546122 |
| 522 | 2 | Magnetic | 466.689305952 | -1.62968912088 |
| 523 | 2 | Magnetic | -437.972825579 | -1.62925638519 |
| 524 | 3 | Electric | -164.808289841 | -1.70736480214 |
| 525 | 3 | Magnetic | -172.009299005 | -1.58374369188 |
|      |   |        |                          |                          |
|------|---|--------|-------------------------|-------------------------|
| 526  | 2 | Electric | 16.802428281            | -0.189470329842         |
| 527  | 2 | Electric | 531.301874898           | -1.63634809797          |
| 528  | 1 | Magnetic | -832.883790488          | -1.63258460881          |
| 529  | 2 | Electric | -545.660351043          | -1.63616769272          |
| 530  | 2 | Electric | 545.660351043           | -1.63616769272          |
| 531  | 2 | Magnetic | 481.047615483           | -1.62987698568          |
| 532  | 1 | Magnetic | -847.24171788           | -1.63259458153          |
| 533  | 2 | Electric | -560.01885367           | -1.63600101973          |
| 534  | 2 | Magnetic | -452.331041111          | -1.62948306332          |
| 535  | 3 | Electric | 193.574384932           | -1.68604975524          |
| 536  | 3 | Magnetic | 186.390424332           | -1.59114109688          |
| 537  | 2 | Electric | 560.01885367           | -1.63600101973          |
| 538  | 1 | Magnetic | -861.599680684          | -1.63260405983          |
| 539  | 2 | Electric | -574.377380771          | -1.63584671909          |
| 540  | 2 | Magnetic | 495.405965647           | -1.6300473839           |
| 541  | 2 | Electric | 574.377380771          | -1.63584671909          |
| 542  | 4 | Magnetic | 48.2168568115          | -0.501770254467         |
| 543  | 1 | Magnetic | -875.957677157          | -1.63261307587          |
| 544  | 2 | Magnetic | -466.689305952          | -1.62968912088          |
| 545  | 2 | Electric | -588.735930534          | -1.6357039524           |
| 546  | 3 | Electric | -179.193320234          | -1.69534567273          |
| 547  | 2 | Electric | 588.735930534          | -1.6357039524           |
| 548  | 1 | Magnetic | -890.315705664          | -1.63262165921          |
| 549  | 3 | Magnetic | -186.390424332         | -1.59114109688          |
| 550  | 2 | Magnetic | 509.764352869          | -1.63020617047          |
| 551  | 2 | Electric | -603.094501325         | -1.6355095397           |
| 552  | 2 | Electric | -16.7201043386        | -0.187558764            |
| 553  | 3 | Magnetic | -16.1843558194         | -0.173067976291         |
| 554  | 3 | Electric | 207.952337367          | -1.67870500984          |
| 555  | 4 | Magnetic | -34.0429573045         | -0.138804081798         |
| 556  | 2 | Magnetic | -481.047615483         | -1.62987698568          |
| 557  | 2 | Electric | 603.094501325         | -1.6355095397           |
| 558  | 1 | Magnetic | -904.673764677         | -1.63262983711          |
| 559  | 2 | Electric | -617.453091672        | -1.63544678151          |
| 560  | 2 | Magnetic | 524.122773985         | -1.63035083111          |
| 561  | 4 | Magnetic | -35.7615668649         | -32.807995179           |
| 562  | 3 | Magnetic | 200.768555076         | -1.59697960495          |
| 563  | 2 | Electric | 617.453091662        | -1.63544678151          |
| 564  | 1 | Magnetic | -919.031852764         | -1.63263763471          |
| 565  | 2 | Electric | -631.811700199        | -1.63533133084          |
| Row | Type      | Value1       | Value2       | Value3       |
|-----|-----------|--------------|--------------|--------------|
| 566 | Magnetic  | -48.2168568115 | -0.501770254467 | *            |
| 567 | Electric  | -16.9098805539 | -0.192166633221 | *            |
| 568 | Magnetic  | -495.405965647 | -1.63004873839 | *            |
| 569 | Magnetic  | 16.1843558194 | -0.173067976291 | *            |
| 570 | Electric  | 631.811700199 | -1.63533133084 | *            |
| 571 | Electric  | -193.574384932 | -1.68604975524 | *            |
| 572 | Magnetic  | -933.389968579 | -1.63264507523 | *            |
| 573 | Magnetic  | 538.481226182 | -1.63048406551 | *            |
| 574 | Electric  | 12.0636288667 | -48.8083820743 | *            |
| 575 | Electric  | -646.170325712 | -1.63522350506 | *            |
| 576 | Electric  | 222.327798973 | -1.67279679401 | *            |
| 577 | Magnetic  | 16.9022954924 | -0.191879357602 | *            |
| 578 | Electric  | 646.170325712 | -1.63522350506 | *            |
| 579 | Magnetic  | -947.748110859 | -1.63265218014 | *            |
| 580 | Magnetic  | 34.0429573045 | -0.138804081798 | *            |
| 581 | Electric  | -660.528967084 | -1.63512264693 | *            |
| 582 | Magnetic  | -200.76855076 | -1.5969760495 | *            |
| 583 | Magnetic  | -509.764352869 | -1.63020617047 | *            |
| 584 | Magnetic  | 552.839706952 | -1.63060704627 | *            |
| 585 | Electric  | 16.9314956591 | -0.192532166917 | *            |
| 586 | Electric  | 660.528967084 | -1.63512264693 | *            |
| 587 | Magnetic  | -962.106278418 | -1.63265896932 | *            |
| 588 | Electric  | -674.887623294 | -1.63502816857 | *            |
| 589 | Magnetic  | 215.144247318 | -1.6016953717 | *            |
| 590 | Electric  | 674.887623294 | -1.63502816857 | *            |
| 591 | Magnetic  | -524.122773985 | -1.63035083111 | *            |
| 592 | Magnetic  | -976.464470138 | -1.6326654612 | *            |
| 593 | Electric  | -689.246293407 | -1.6349354283 | *            |
| 594 | Magnetic  | 567.198214054 | -1.63072079933 | *            |
| 595 | Electric  | -207.952337367 | -1.67870500894 | *            |
| 596 | Magnetic  | 236.701234192 | -1.66797074682 | *            |
| 597 | Electric  | -12.0636288667 | -48.8083820743 | *            |
| 598 | Electric  | 689.246293407 | -1.6349354283 | *            |
| 599 | Electric  | -703.604976566 | -1.63485629594 | *            |
| 600 | Magnetic  | 16.7709673572 | -0.188837470947 | *            |
| 601 | Magnetic  | 581.556745474 | -1.63082622543 | *            |
| 602 | Magnetic  | -538.481226182 | -1.63048406551 | *            |
| 603 | Electric  | 703.604976566 | -1.63485629594 | *            |
| 604 | Electric  | -717.963671982 | -1.63477800111 | *            |
| 605 | Magnetic  | -215.144247318 | -1.60166953717 | *            |
| Row | Type     | X-Coord  | Y-Coord  |
|-----|----------|----------|----------|
| 606 | Electric | 717.963671982 | -1.63477800111 |
| 607 | Magnetic | 595.9152994  | -1.63092411803 |
| 608 | Magnetic | -552.839706952 | -1.63060704627 * |
| 609 | Electric | -222.327798973 | -1.67279679401 * |
| 610 | Magnetic | -16.8820629789 | -0.191492685791 * |
| 611 | Electric | 251.072997703  | -1.6639760758 |
| 612 | Magnetic | 229.517931025  | -1.6054931594 |
| 613 | Magnetic | 610.273874198  | -1.6310517825 |
| 614 | Magnetic | -567.198214054 | -1.63072079933 * |
| 615 | Magnetic | 35.761568649  | -32.807995179 |
| 616 | Magnetic | 624.632468389  | -1.6310002751 |
| 617 | Magnetic | -229.517931025 | -1.6054931594 |
| 618 | Electric | 265.443365363  | -1.66063106102 |
| 619 | Electric | -236.701234192 | -1.66797074682 * |
| 620 | Magnetic | -581.556745474 | -1.63082622543 * |
| 621 | Magnetic | 638.991080629  | -1.63117921814 |
| 622 | Magnetic | 243.88994273  | -1.60865487074 |
| 623 | Electric | 16.8504481714  | -0.1905707501 |
| 624 | Magnetic | -595.9152994  | -1.63092411803 * |
| 625 | Magnetic | 653.349709699  | -1.6312532424 |
| 626 | Electric | -16.9222503575 | -0.19236906962 * |
| 627 | Electric | 16.9385887356  | -0.192662656072 |
| 628 | Electric | 279.812555127  | -1.65780131182 |
| 629 | Electric | -251.072997703 | -1.6639760758 |
| 630 | Magnetic | -610.273874198 | -1.6310517825 * |
| 631 | Magnetic | 667.708354487  | -1.63132254016 |
| 632 | Magnetic | -243.88994273 | -1.60865487074 |
| 633 | Magnetic | 16.916688769  | -0.192165149751 |
| 634 | Magnetic | 258.260548986  | -1.61129690161 |
| 635 | Magnetic | 682.067013976  | -1.63138750546 |
| 636 | Magnetic | -624.632468389 | -1.6310002751 * |
| 637 | Electric | 294.180741586  | -1.65538564255 |
| 638 | Electric | -265.443365363 | -1.66063106102 * |
| 639 | Magnetic | 696.425687237  | -1.63144849209 |
| 640 | Magnetic | -16.7709673572 | -0.188837470947 * |
| 641 | Magnetic | -638.991080629 | -1.63117921814 * |
| 642 | Magnetic | 710.794373417  | -1.63150581847 |
| 643 | Magnetic | -258.260548986 | -1.61129690161 * |
| 644 | Electric | 308.5480663  | -1.65330665113 |
| 645 | Magnetic | -653.349709699 | -1.6312532424 * |
|   |   |   |
|---|---|---|
| 646 | 3 | Electric | -279.812655127 | -1.65780131182 |
| 647 | 3 | Magnetic | 272.629963303 | -1.61352817033 |
| 648 | 2 | Magnetic | 725.143071732 | -1.63155977178 |
| 649 | 2 | Magnetic | -667.708354487 | -1.63132254016 |
| 650 | 2 | Magnetic | 739.501781463 | -1.63161061156 |