

Figure S1. Fluorescence spectrum of complex 1.

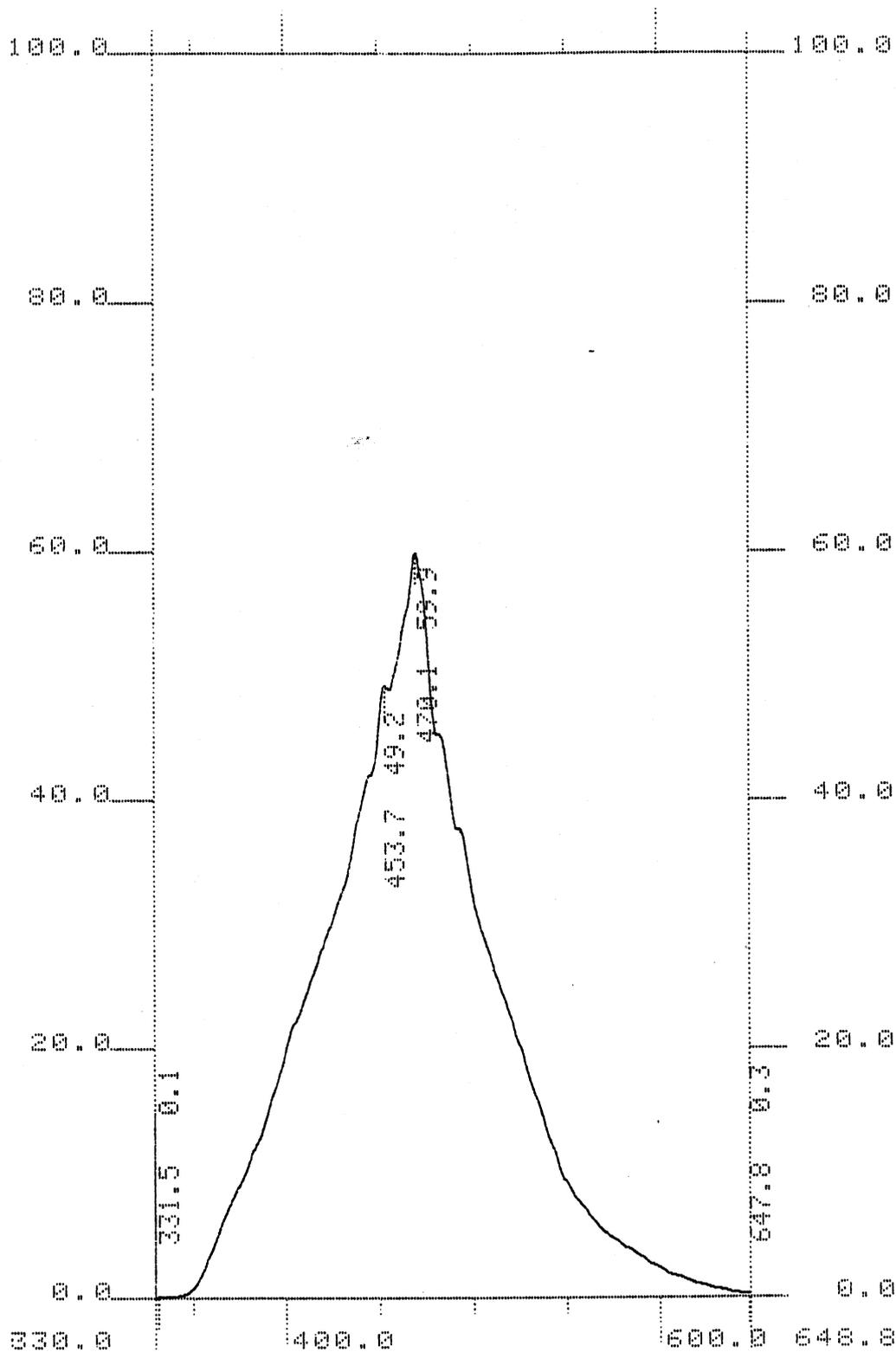


Figure S2. Fluorescence spectrum of complex 2.

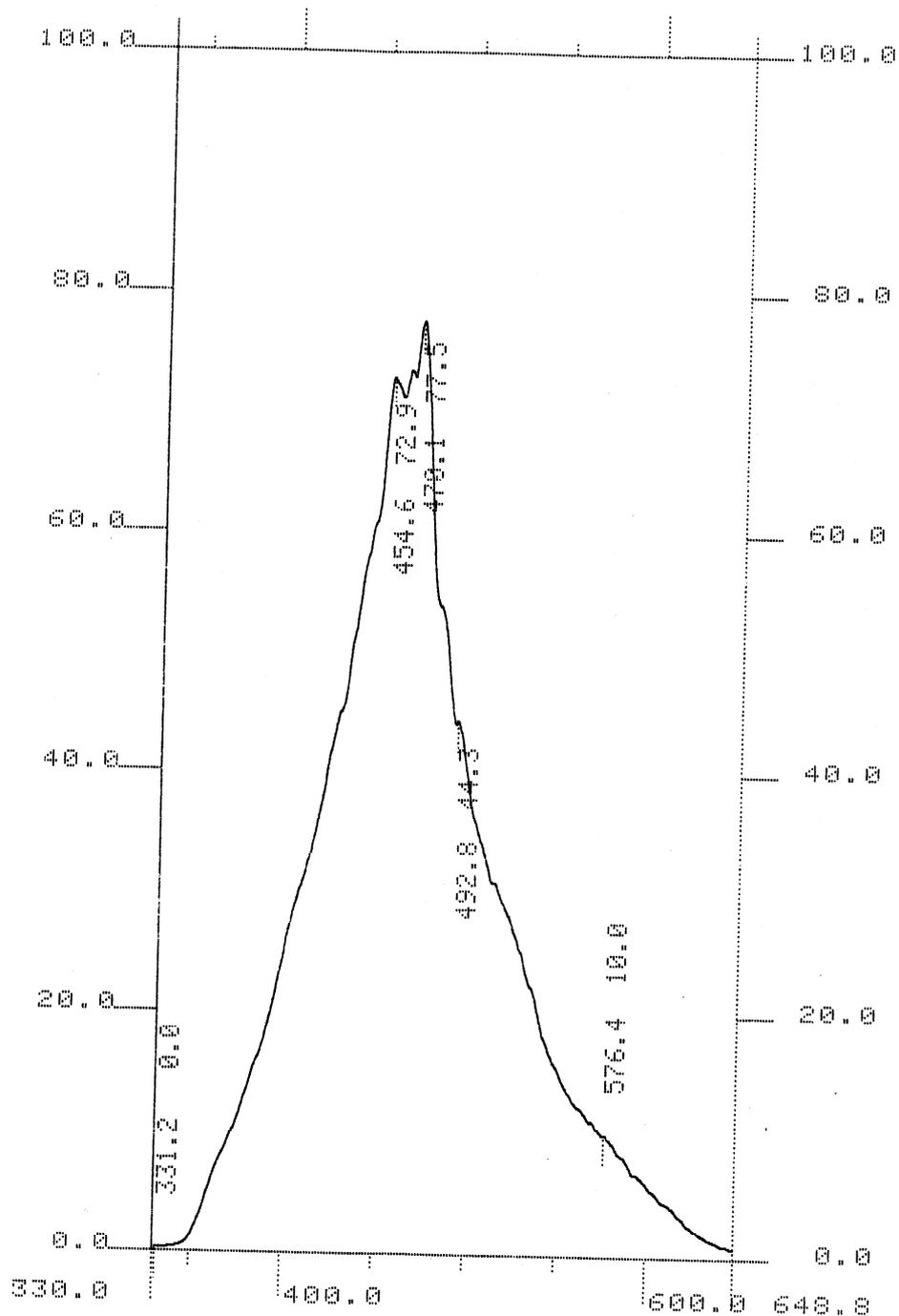


Figure S3. Fluorescence spectrum of complex 3.

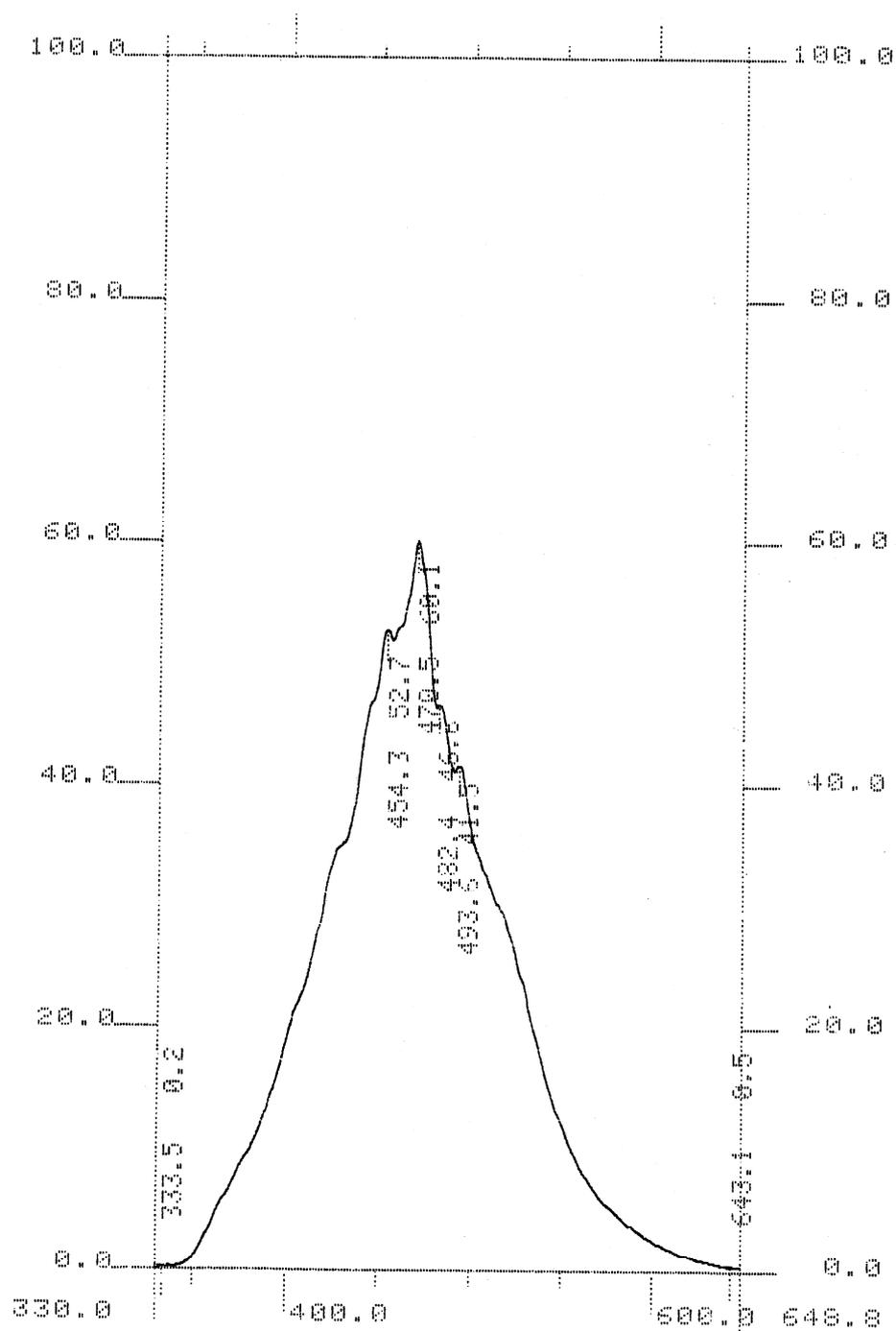


Figure S4. Fluorescence spectrum of complex 4.

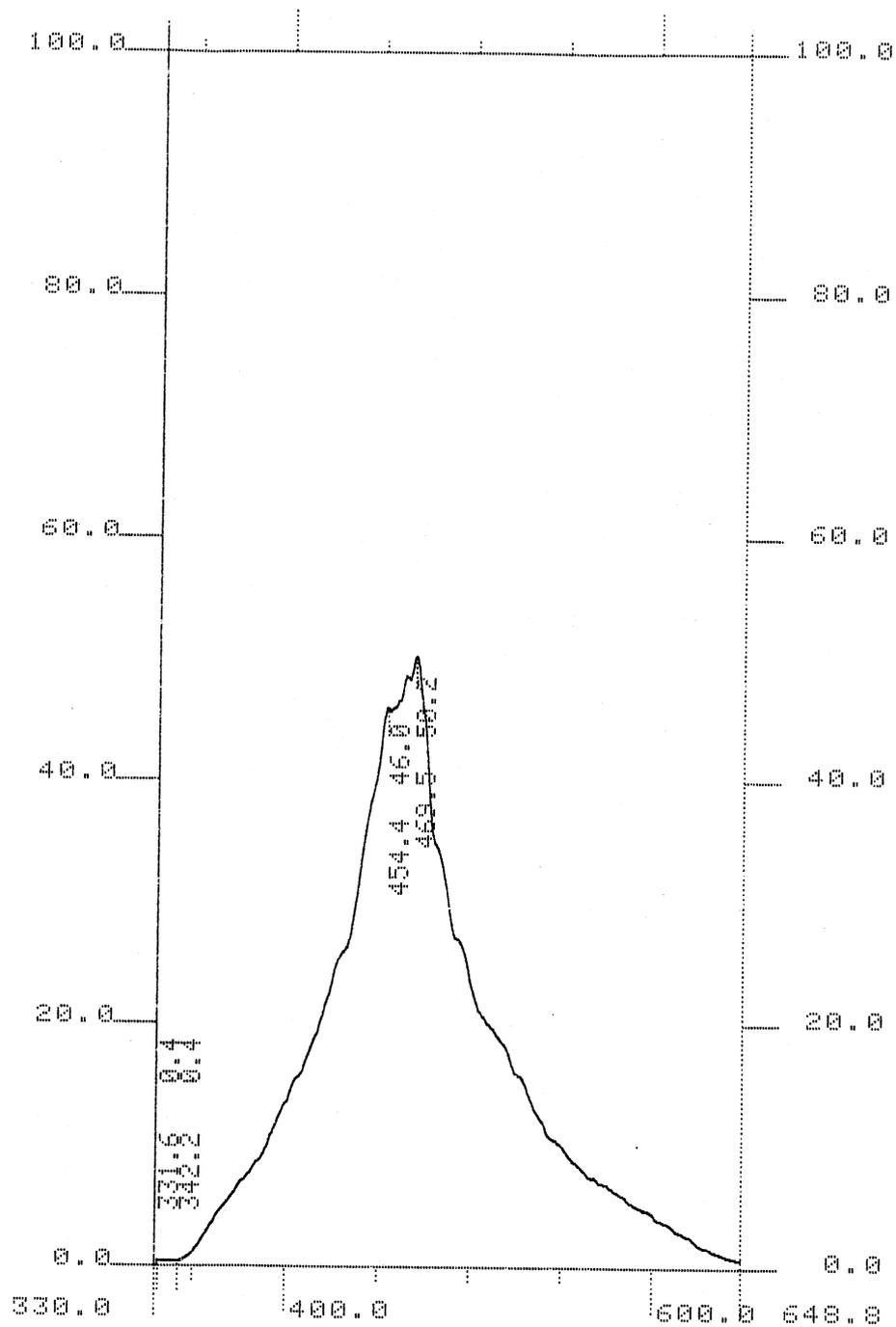


Figure S5. Fluorescence spectrum of complex 5.

**Table S1.** Selected Bond Angles (°) for Complex 1

|                         |           |                         |            |
|-------------------------|-----------|-------------------------|------------|
| O1-Ni1-O3 <sup>i</sup>  | 83.15(8)  | O1-Ni1-O6               | 92.49(9)   |
| O1-Ni1-O7               | 92.42(8)  | O1-Ni1-N1               | 174.35(9)  |
| O1-Ni1-N2               | 95.37(10) | O3 <sup>i</sup> -Ni1-O6 | 85.03(8)   |
| O3 <sup>i</sup> -Ni1-O7 | 175.46(8) | O3 <sup>i</sup> -Ni1-N1 | 93.55(8)   |
| O3 <sup>i</sup> -Ni1-N2 | 92.64(9)  | O6-Ni1-O7               | 94.20(9)   |
| O6-Ni1-N1               | 91.79(9)  | O6-Ni1-N2               | 171.48(10) |
| O7-Ni1-N1               | 90.95(9)  | O7-Ni1-N2               | 88.76(9)   |
| N1-Ni1-N2               | 80.16(9)  |                         |            |

Symmetry code, i: x, 1.5-y, z-0.5.

**Table S2.** Selected Bond Angles (°) for Complex 2

|           |            |           |           |
|-----------|------------|-----------|-----------|
| O1-Ni1-O6 | 90.66(14)  | O1-Ni1-N1 | 91.88(15) |
| O1-Ni1-N2 | 171.09(15) | O1-Ni1-N3 | 94.69(14) |
| O1-Ni1-N4 | 85.17(14)  | O6-Ni1-N1 | 87.46(16) |
| O6-Ni1-N2 | 89.69(15)  | O6-Ni1-N3 | 95.25(17) |
| O6-Ni1-N4 | 173.18(15) | N1-Ni1-N2 | 79.24(17) |
| N1-Ni1-N3 | 172.86(16) | N1-Ni1-N4 | 98.05(16) |
| N2-Ni1-N3 | 94.14(16)  | N2-Ni1-N4 | 95.27(15) |
| N3-Ni1-N4 | 79.75(16)  |           |           |

**Table S3.** Selected Bond Angles (°) for Complex 3

|           |            |           |            |
|-----------|------------|-----------|------------|
| N1-Ni1-N2 | 79.70(11)  | N1-Ni1-N3 | 97.10(10)  |
| N1-Ni1-N4 | 94.44(11)  | N1-Ni1-N5 | 168.06(10) |
| N1-Ni1-N6 | 92.98(10)  | N2-Ni1-N3 | 91.66(10)  |
| N2-Ni1-N4 | 168.31(10) | N2-Ni1-N5 | 92.14(11)  |
| N2-Ni1-N6 | 95.73(10)  | N3-Ni1-N4 | 78.95(11)  |
| N3-Ni1-N5 | 91.79(10)  | N3-Ni1-N6 | 168.43(11) |
| N4-Ni1-N5 | 95.08(11)  | N4-Ni1-N6 | 94.66(11)  |
| N5-Ni1-N6 | 79.08(11)  |           |            |

**Table S4.** Selected Bond Angles (°) for Complex 4

|                         |           |                         |           |
|-------------------------|-----------|-------------------------|-----------|
| O1-Ni1-O5 <sup>i</sup>  | 85.19(8)  | O1-Ni1-O6               | 93.27(8)  |
| O1-Ni1-O7               | 86.27(8)  | O1-Ni1-N1               | 174.61(7) |
| O1-Ni1-N2               | 95.35(8)  | O5 <sup>i</sup> -Ni1-O6 | 86.23(8)  |
| O5 <sup>i</sup> -Ni1-O7 | 171.29(7) | O5 <sup>i</sup> -Ni1-N1 | 96.13(8)  |
| O5 <sup>i</sup> -Ni1-N2 | 88.22(8)  | O6-Ni1-O7               | 92.55(8)  |
| O6-Ni1-N1               | 92.04(8)  | O6-Ni1-N2               | 169.32(8) |
| O7-Ni1-N1               | 92.54(8)  | O7-Ni1-N2               | 94.29(8)  |
| N1-Ni1-N2               | 79.48(8)  |                         |           |

Symmetry code, i: -1+x, y, -1+z.

**Table S5.** Selected Bond Angles (°) for Complex 5

|             |            |             |            |
|-------------|------------|-------------|------------|
| N1-Ni1-N2   | 78.63(10)  | N1-Ni1-N3   | 94.01(10)  |
| N1-Ni1-N4   | 93.35(10)  | N1-Ni1-N5   | 92.92(10)  |
| N1-Ni1-N6   | 167.01(10) | N2-Ni1-N3   | 169.93(10) |
| N2-Ni1-N4   | 94.90(10)  | N2-Ni1-N5   | 90.09(10)  |
| N2-Ni1-N6   | 91.70(10)  | N3-Ni1-N4   | 78.54(10)  |
| N3-Ni1-N5   | 97.19(10)  | N3-Ni1-N6   | 96.56(10)  |
| N4-Ni1-N5   | 172.65(10) | N4-Ni1-N6   | 96.14(10)  |
| N5-Ni1-N6   | 78.29(10)  | N7-Ni2-N8   | 78.43(11)  |
| N7-Ni2-N9   | 91.48(10)  | N7-Ni2-N10  | 93.57(11)  |
| N7-Ni2-N11  | 170.88(11) | N7-Ni2-N12  | 96.14(11)  |
| N8-Ni2-N9   | 94.64(10)  | N8-Ni2-N10  | 169.49(10) |
| N8-Ni2-N11  | 94.27(10)  | N8-Ni2-N12  | 92.37(10)  |
| N9-Ni2-N10  | 78.61(10)  | N9-Ni2-N11  | 94.59(10)  |
| N9-Ni2-N12  | 170.54(11) | N10-Ni2-N11 | 94.30(10)  |
| N10-Ni2-N12 | 95.28(10)  | N11-Ni2-N12 | 78.55(10)  |