

## Supplementary Information

### **Novel bluish green benzimidazole-based iridium(III) complexes for highly efficient phosphorescent organic light-emitting diodes**

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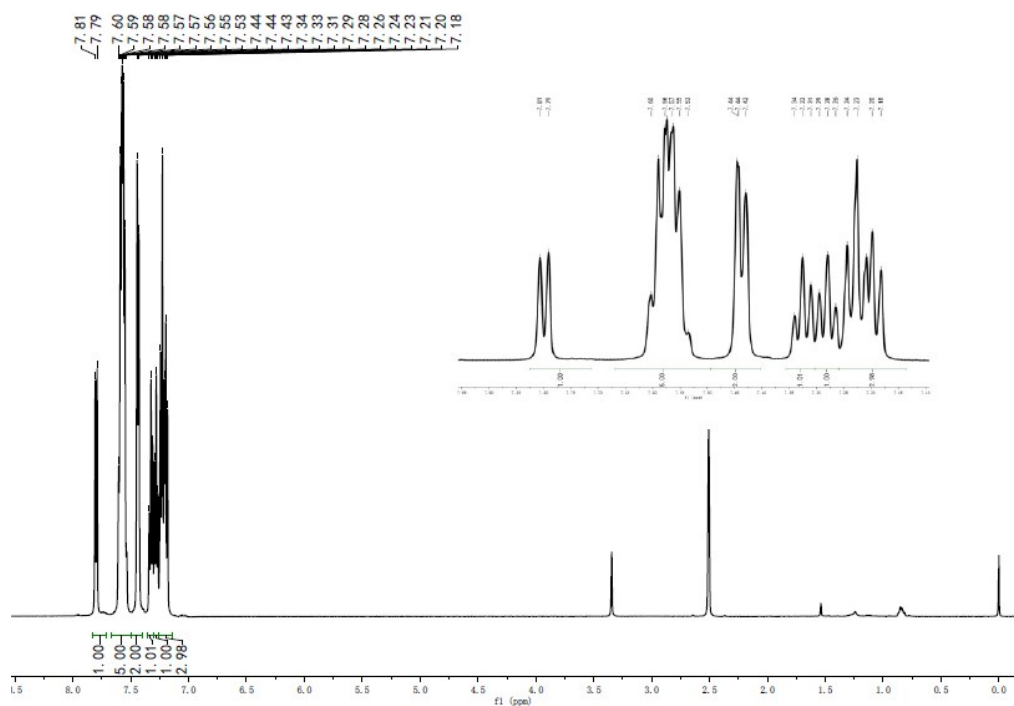


Figure S1 <sup>1</sup>H NMR of 1F ligand.

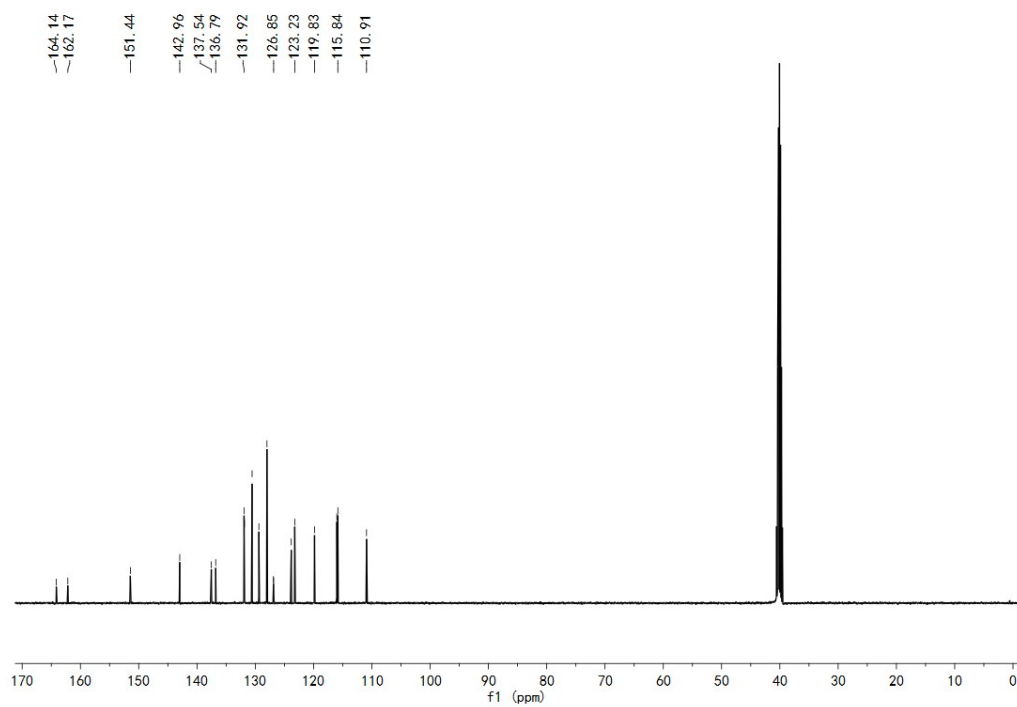


Figure S2 <sup>13</sup>C NMR of 1F ligand.

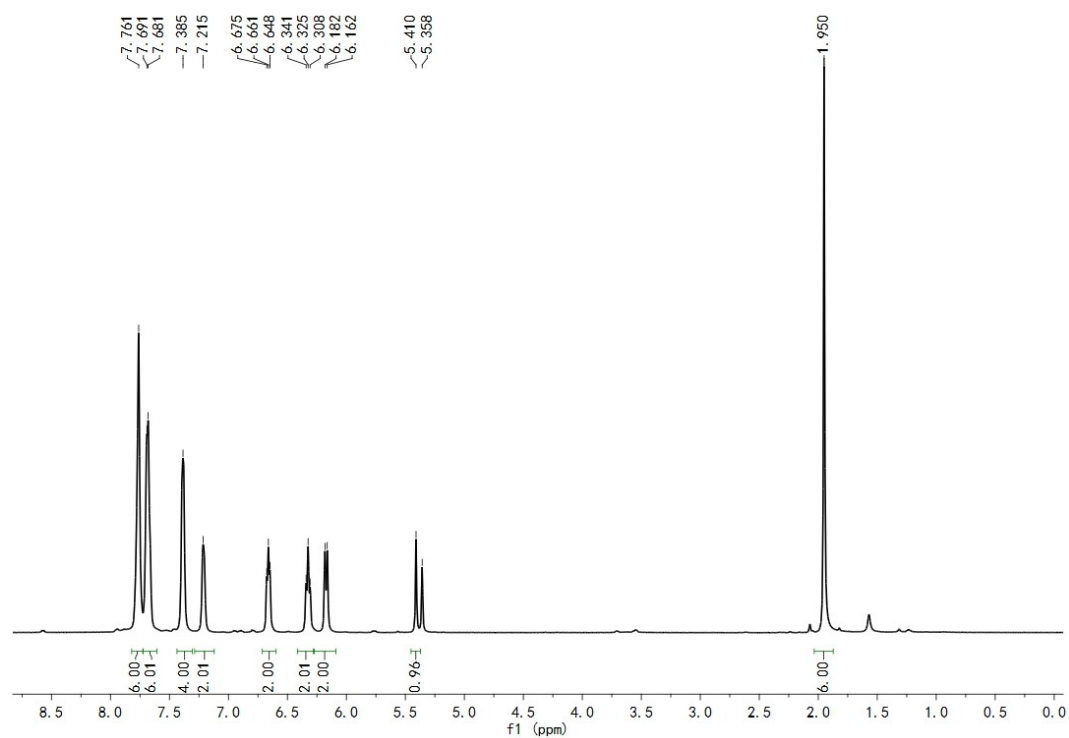


Figure S3  $^1\text{H}$  NMR of 1F-Ir.

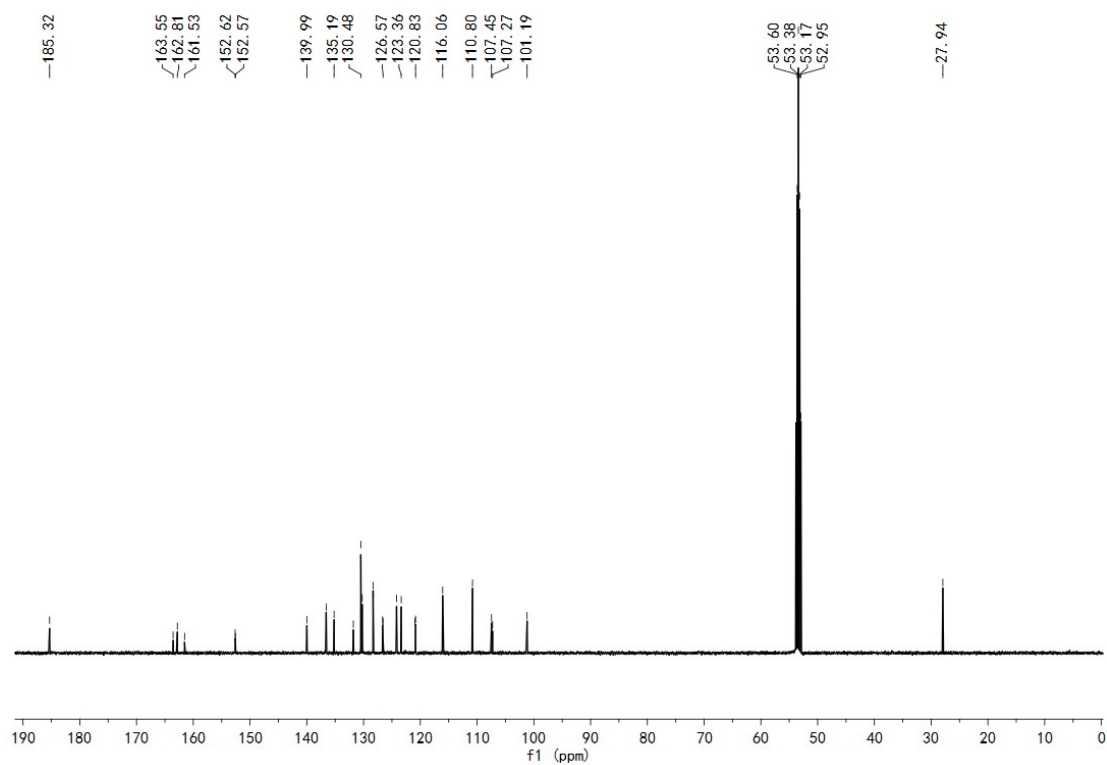
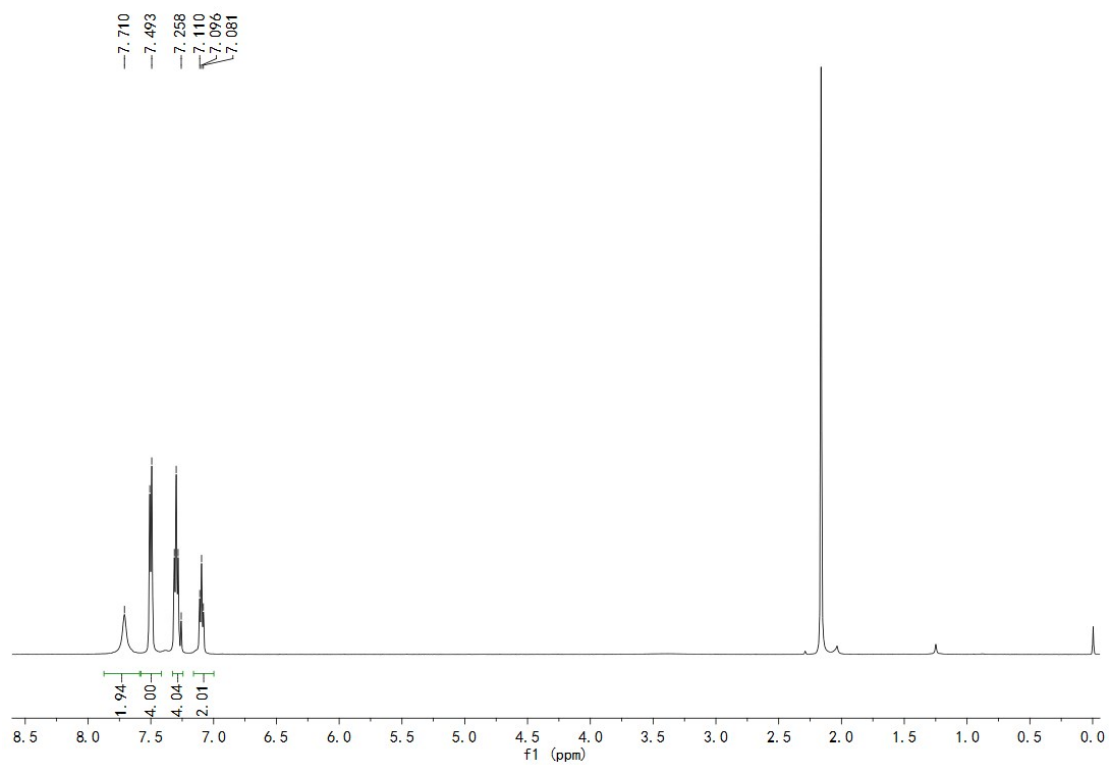
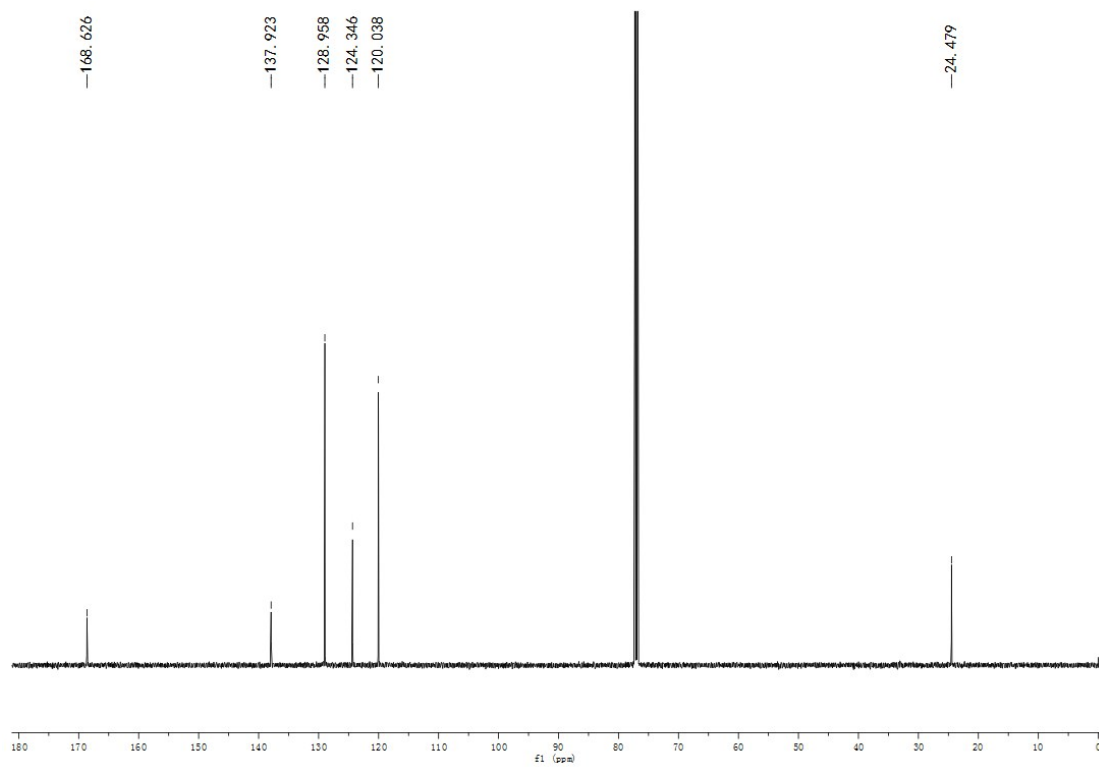


Figure S4  $^{13}\text{C}$  NMR of 1F-Ir.



**Figure S5  $^1\text{H}$  NMR of 2F ligand.**



**Figure S6  $^{13}\text{C}$  NMR of 2F ligand.**

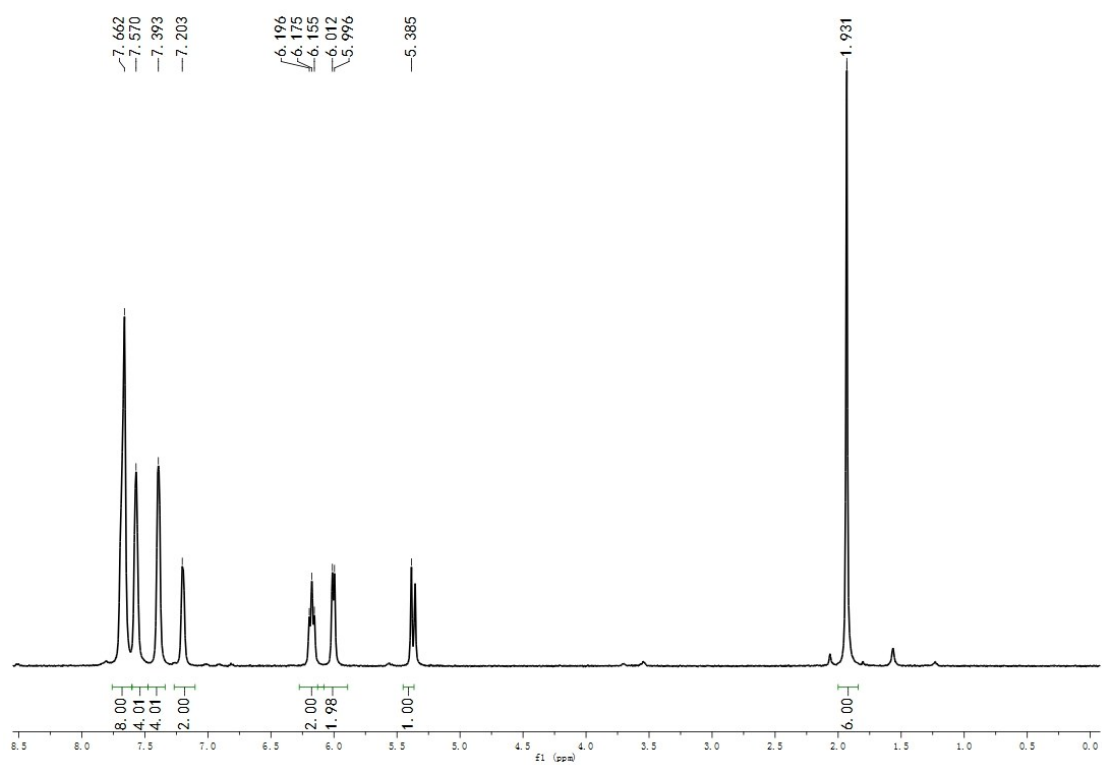


Figure S7  $^1\text{H}$  NMR of 2F-Ir.

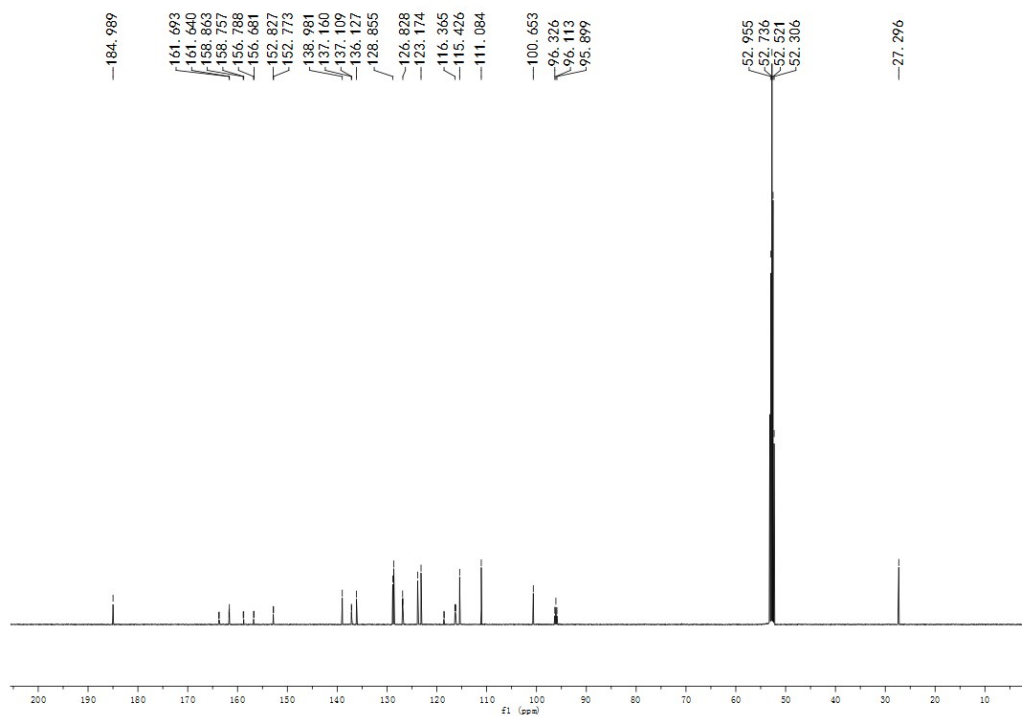
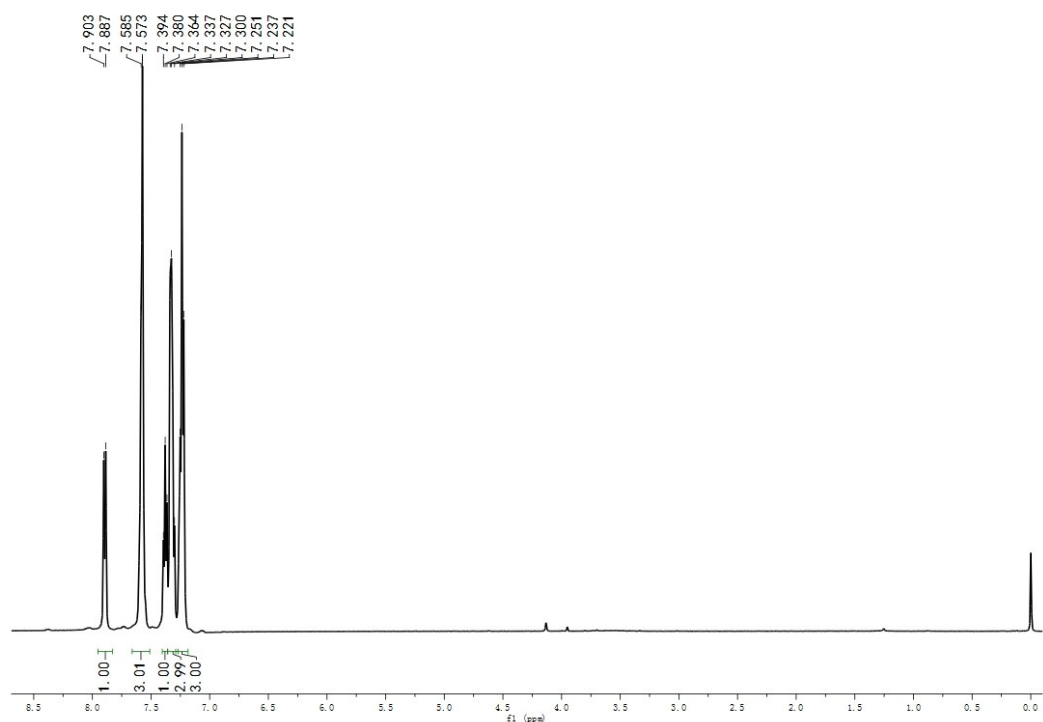
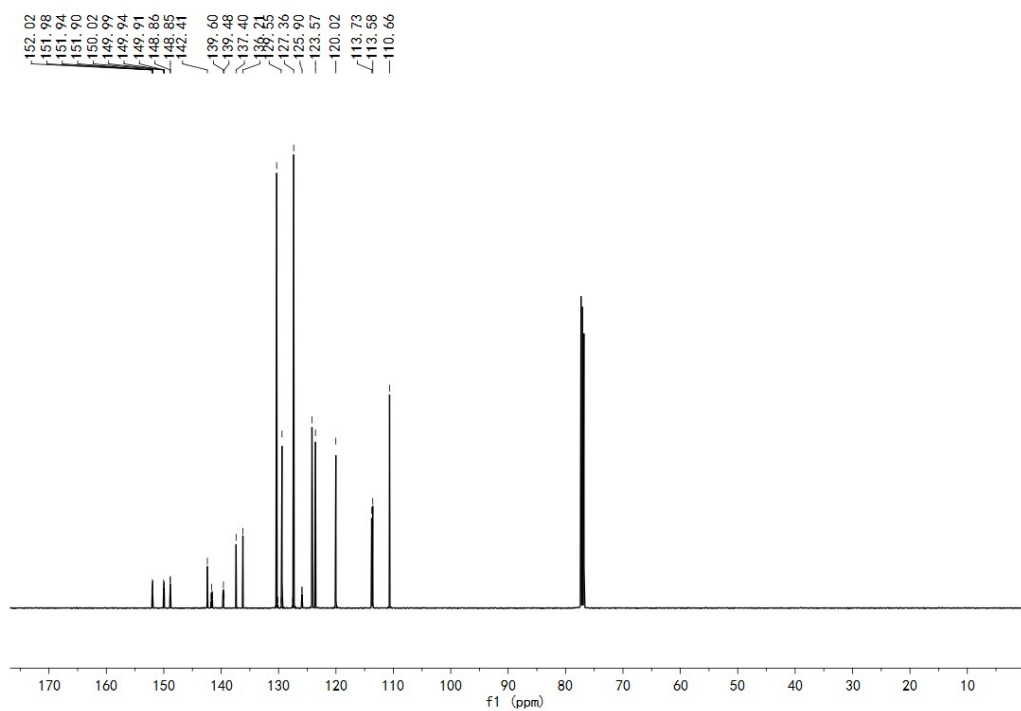


Figure S8  $^{13}\text{C}$  NMR of 2F-Ir.



**Figure S9 <sup>1</sup>H NMR of 3F ligand.**



**Figure S10 <sup>13</sup>C NMR of 3F ligand.**

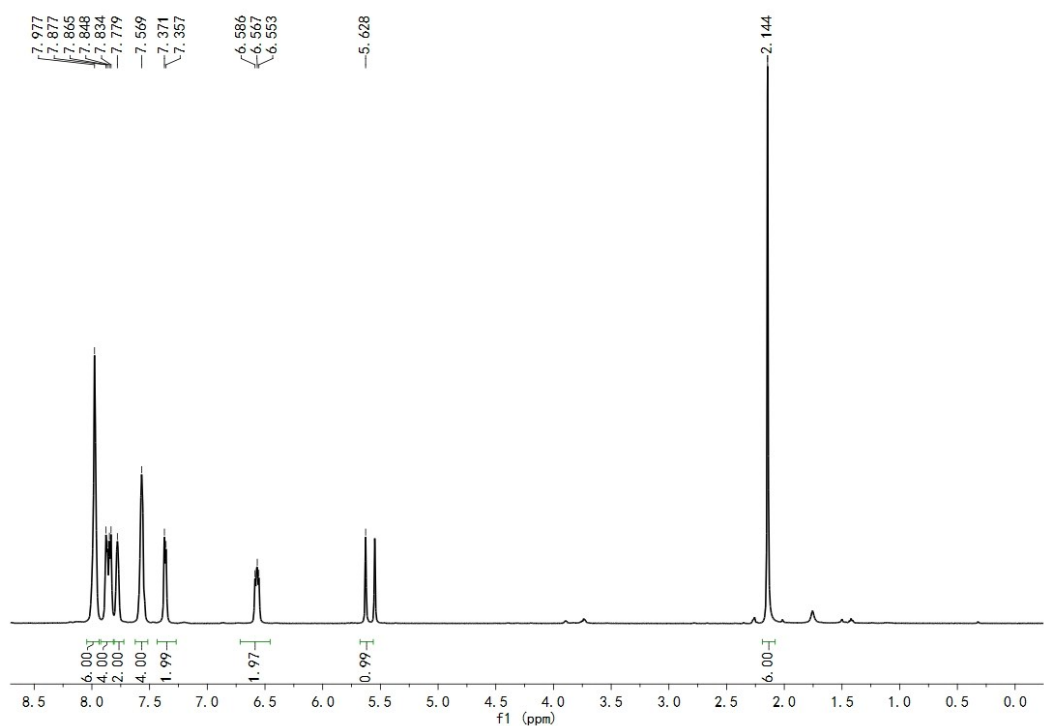


Figure S11 <sup>1</sup>H NMR of 3F-Ir.

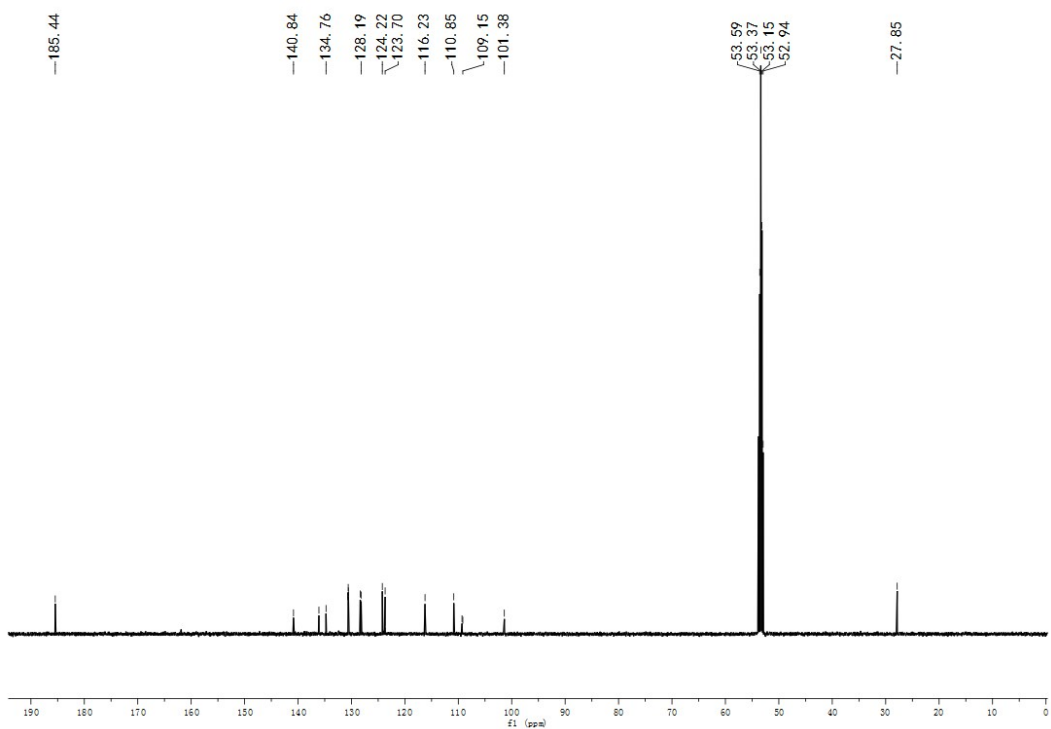
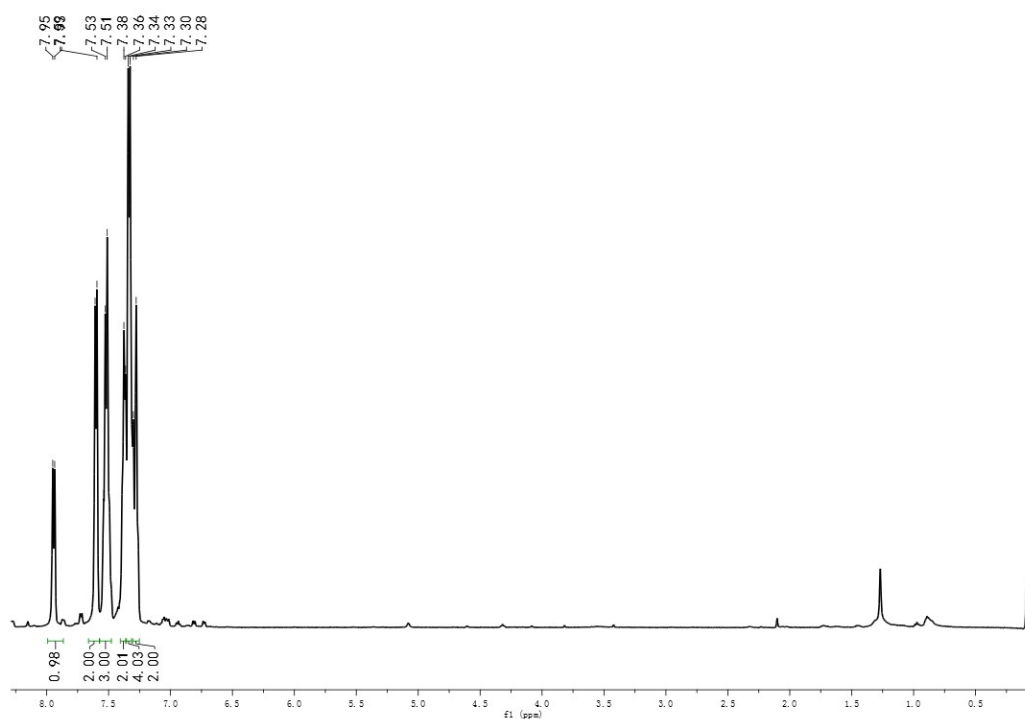
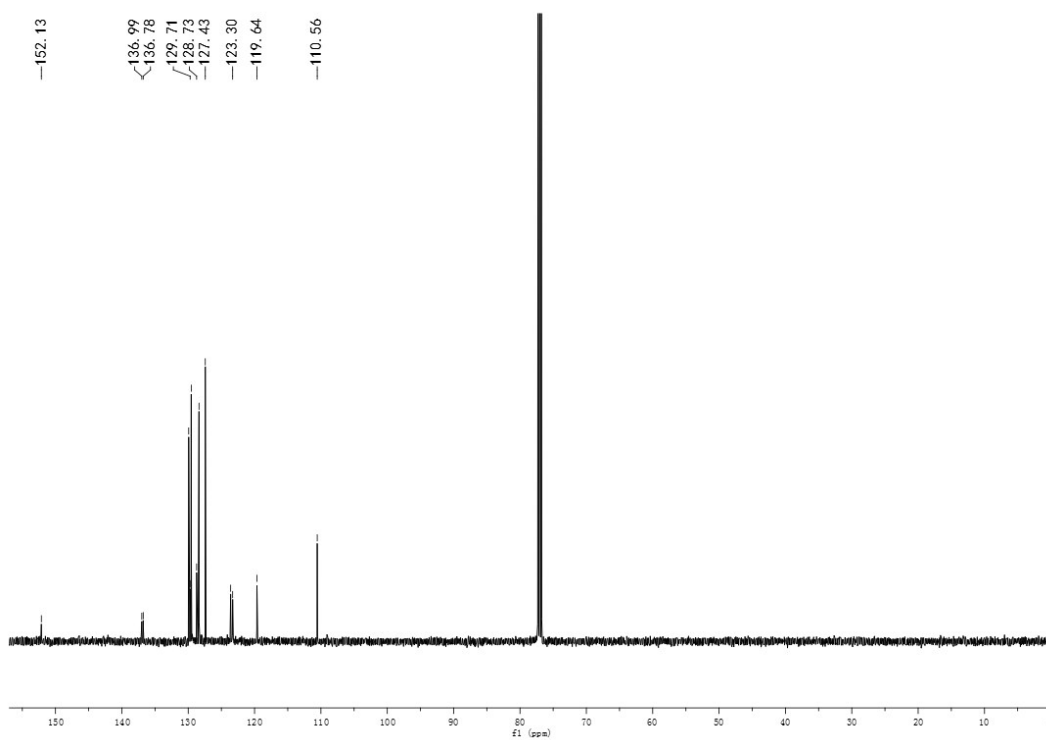


Figure S12 <sup>13</sup>C NMR of 3F-Ir.

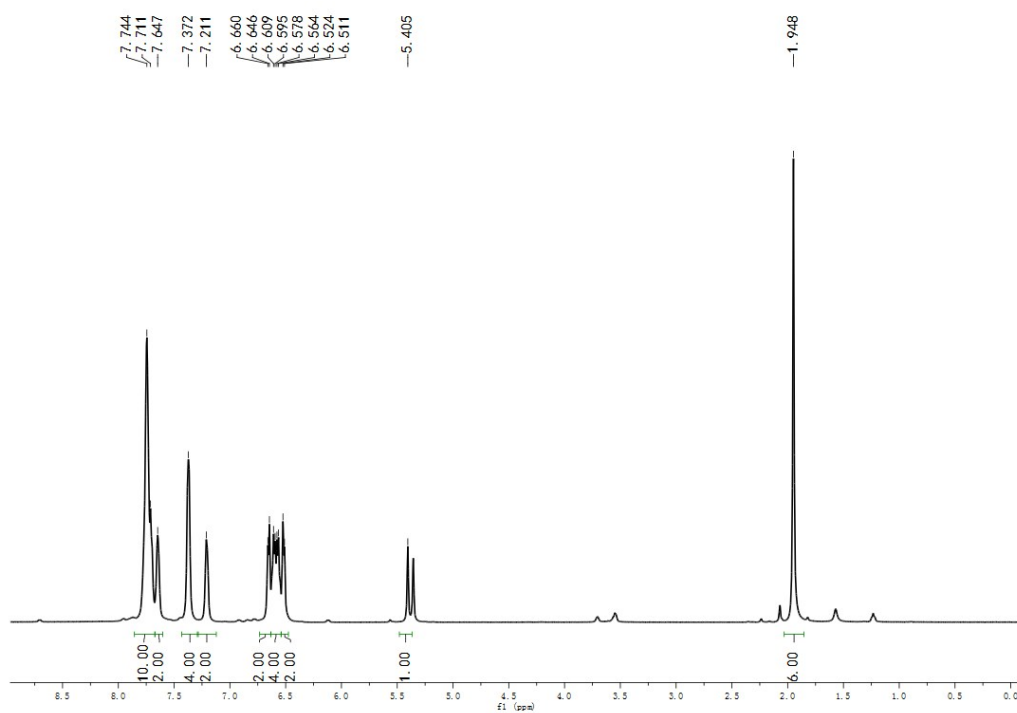


**Figure S13  $^1\text{H}$  NMR of 0F ligand.**

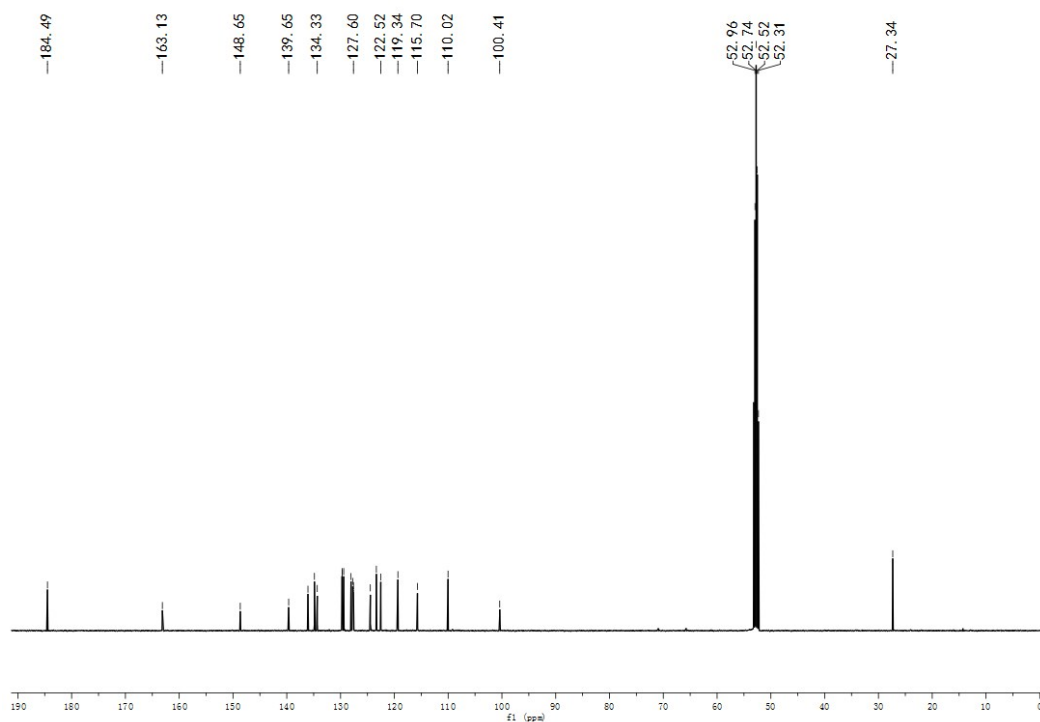


**Figure S14  $^{13}\text{C}$  NMR of 0F ligand.**





**Figure S15 <sup>1</sup>H NMR of 0F-Ir.**



**Figure S16 <sup>13</sup>C NMR of 0F-Ir.**