Supplementary Information for

"Can photons undergo Bose-Einstein condensation?"

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附录 A

介绍：能动量空间发光分布计算代码 (代码语言 matlab)

```
%{
h=6.626e-34/2/pi;
pi=3.14159265;
kb=1.38e-23;
T=300;
y=2*pi*1e9
m=h*h/1e-3
E=h*h*k.*k/2/m;
fai=1.6e-19
u=1e-3*fai*fai
%}
K=-1e8:0.01e8:1e8;
W=0:0.005e12:1e12;
[k,w]=meshgrid(K,W);
P=fun(k,w);
%contour(k,w,P)
%mesh(k,w,P);
pcolor(k,w,P)
shading flat
colormap(jet)
colorbar
%a=min(min(P));
%b=max(max(P));
%caxis([a b])
hold on
%contour(k,w,P,'linewidth',0.05,'color','w')
function P=fun(k,w)
pi=3.14159265;
h=6.626e-34/2/pi;
kb=1.38e-23;
T=300;
y=2*pi*1e9;
m=h*h/1e-3;
fai=1.6e-19;
u=1e-3*fai*fai;
%E=h*h*k.*k/2/m;
E=h*h*k.*k/2/m;
P=log(4*h./(exp(h*w/kb/T)-
1).*y.*(E+w).*(E+2*fai+w)./(4*y*y.*w.*w+(E.*E+2*E*u-
w.*w).*(E.*E+2*E*u-w.*w)));
end
```