What is claimed is:

1. A downhole tool, comprising:

a tool body;

a light sensor coupled to the tool body;

a scintillator coupled to the light sensor and comprising a vessel containing a liquid scintillator; and

a piston in fluid communication with the liquid scintillator and with at least one of an inner surface and an outer surface of the tool body;

wherein the tool body comprises a fluid port through at least one of the inner surface and the outer surface of the tool body, and the piston is in fluid communication with the outer surface of the tool body through the fluid port.

2. The downhole tool of claim 1, wherein the piston is at least partially within the vessel.

3. The downhole tool of claim 2, wherein the vessel is arranged axially parallel with the tool body.

4. The downhole tool of claim 2, wherein the vessel is arranged axially perpendicular to the tool body.

5. The downhole tool of claim 1, wherein the scintillator is one of a plurality of scintillators spaced and equal angular intervals around the tool body.

6. The downhole tool of any one of claims 1-5, wherein the light sensor comprises at least one of a photomultiplier tube, photocells, PIN diodes, photodiode or a quantum dot graphene-based photon sensors, and one or more Geiger-Müller tubes.

7. The downhole tool of any one of claims 1-5, wherein the liquid scintillator comprises a liquid solution of one or more types of scintillating crystals and a solvent.

8. A method, comprising:

positioning a scintillator within a borehole in the subterranean formation, wherein the scintillator comprises a vessel containing liquid scintillator;

balancing a pressure of the liquid scintillator with a pressure of a drilling fluid within the borehole; and

receiving an output signal from a light sensor coupled to the vessel.

9. The method of claim 8, wherein balancing the pressure of the liquid scintillator with the pressure of the drilling fluid within the borehole comprises providing a piston in fluid communication with the liquid scintillator and the drilling fluid.

10. The method of claim 9, wherein the piston is at least partially within the vessel.

11. The method of claim 9, wherein positioning the scintillator within the borehole comprises positioning within the borehole a downhole tool to which the scintillator is coupled.

12. The method of claim 11, wherein the scintillator is arranged axially perpendicular to a tool body of the downhole tool.

13. The method of claim 11, wherein the scintillator is arranged axially parallel to a tool body of the downhole tool.

14. The method of claim 11, wherein positioning the scintillator within the borehole comprises positioning within the borehole a downhole tool to which a plurality of scintillators is coupled.

15. The method of claim 11, wherein positioning the scintillator within the borehole comprises positioning within the borehole a downhole tool to which a plurality of scintillators is coupled at equal angularly spaced intervals.

16. The method of claim 11, wherein

the downhole tool comprises a tool body; and

providing the piston in fluid communication with the liquid scintillator and the drilling fluid the tool body comprises providing the piston in fluid communication with the drilling fluid through a fluid port through at least one of an inner surface and an outer surface of the tool body.

17. The method of any one of claims 8-16, further comprising determining at least one characteristic of the subterranean formation based, at least in part, on the received output signal.

18. The method of any one of claims 8-16, wherein the light sensor comprises at least one of a photomultiplier tube, photocells, PIN diodes, photodiode or a quantum dot graphene-based photon sensors, and one or more Geiger-Müller tubes.

19. The method of any one of claims 8-16, wherein the liquid scintillator comprises a liquid solution of one or more types of scintillating crystals and a solvent.