Claims

1. A single or double sided photometric lens for illuminating a sign, the photometric lens comprising a flat lens panel having a dot matrix pattern which is printed using mesh and stencil and a clear ink pigmented to create a tint on the dot matrix pattern which tint aids light being reflected from within the flat lens panel, the photometric lens being adapted to be placed in juxtaposition with a graphics panel, the photometric lens has one edge lit by a strip of light emitting diodes (LED's) and the lens is adapted to spread the LED's light evenly across the graphics panel and through a clip-on frame for the photometric lens and graphics panel(s) while not producing any shadow cast by the dot matrix pattern.

2. An illuminated sign including the single or double sided photometric lens as claimed in claim 1 fitted to the clip-on frame which provides edge light distribution for the sign.

3. An illuminated sign as claimed in claim 2 wherein the photometric lens has in its upper edge a series of cut-outs into which LED's of the LED strip fit when the sign is assembled.

4. An illuminated sign as claimed in claim 2 or claim 3 wherein the sign has a housing along its upper edge which covers the LED strip and its connecting wires and in which housing is mounted electronics which run the LED's and a power source for the electronics and LED's.

5. An illuminated sign as claimed in any one of claims 2 to 4 wherein the graphics panel includes a pictogram or word(s).

6. An illuminated sign as claimed in claim any one of claims 2 to 5 wherein the dot matrix pattern which forms a photometric design is printed on one side of an acrylic blade panel and in which a ~~special~~ ink system is used which allows the natural reflection of light

through both surfaces while not producing any shadowing through both surfaces, when in contact with the graphic panels.

7. An illuminated sign as claimed in any one of claims 2 to 6 wherein the pigmented ink is applied in one pass through the mesh and stencil so that in the one pass a measured build up of the ink is applied to the surface of the flat lens panel.

8. An illuminated sign as claimed in claim 7 wherein the dot matrix pattern is produced by a screen formed from polyester mesh.

9. The illuminated sign as claimed in claim 7 or 8 wherein the mesh has a mesh count of about 120 strands each way to produce the required dot matrix pattern.

10. An illuminated sign as claimed in any one of claims 2 to 9 wherein the frame is an existing exit sign.