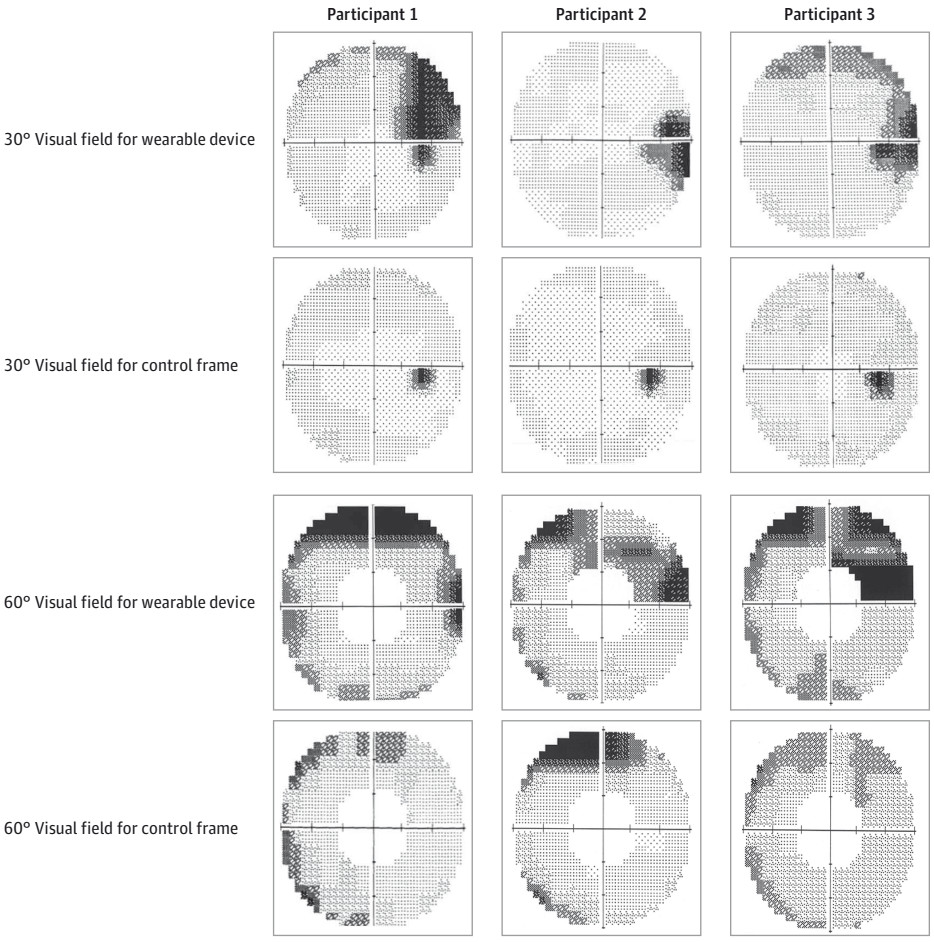
Figure 2. Visual Field Testing of 3 Participants



The gray-black areas demonstrate blind spots (scotomas) where the visual field has reduced (darker gray) or no (black) sensitivity to light and visual stimulation. Participant 1 has a pupillary distance of 70 mm and the wearable device scotoma is present in both the 30° and 60° peripheral field test. Participant 2 has a pupillary distance of 62.5 mm and the wearable device scotoma is present in the 30° test but is significantly greater in the 60° test. There is a superior scotoma in the 60° field in the control assessment, likely the effect of the spectacle frame, with an additional temporal scotoma induced by wearable device. Participant 3 has a pupillary distance of 59.5 mm and the wearable device scotoma is present in the 30° test and is significantly greater in the 60° superotemporal quadrant. There is a trace superior defect in the 60° field in the control assessment, likely the effect of the spectacle frame.

study is also limited by the lack of data on other visual parameters (eg, contrast sensitivity) and functional outcomes (eg, driving ability in a simulated setting).

The image analysis was limited to images posted on the Internet and therefore may not be representative. However, many of the images were created by the manufacturer as the intended mode of wearing the device and were clearly in the pupillary axis, whereas others were above the limbus, suggesting variability in how the device is worn and potentially the magnitude of any resulting scotoma.

Additional studies are needed to understand the effects of these devices on visual function, particularly as their use becomes increasingly common.

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Author Contributions: Dr Minckler had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.
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Acquisition, analysis, or interpretation of data: All authors.
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