SUPPLEMENTAL DIGITAL CONTENT

SDC Table 1. Demographics and vision characteristics of central vision loss (CVL) patients without a scotoma, age-matched CVL patients with a scotoma, and age-matched normally-sighted controls

	Central Vision Loss					
	Normally-Sighted	Scotoma	Nonscotoma			
	(*n* = 14)	(*n* = 7)	(*n* = 7)			
	Mean (*SD*)	Mean (*SD*)	Mean (*SD*)	Test Statistic	*df*	*p*-value
Demographics						
Age (years)	52.6 (12.9)	53.4 (10.3)	48.8 (16.8)	0.47[b]	2,25	0.78
Gender, Male (%)	71%	43%	57%	1.64[c]	2	0.44
Length of Vision Impairment (years)	-	33.3 (17.8)	39.3 (15.8)	0.69[d]	12	0.50
Vision Measures						
Visual Acuity (logMAR) ↓	0.02 (0.06)	0.73 (0.20)	0.60 (0.21)	65.01[b]	2,25	<0.001[e]
Contrast Sensitivity (log units) ↑	1.92 (0.12)[a]	1.34 (0.22)	1.63 (0.37)	14.41[b]	2,24	<0.001[e]

All tests were performed binocularly.
[a]*n* = 13
[b]*F*-value
[c]$\chi 2$ value
[d]*t*-value
[e]Normally-sighted group had significantly better visual acuity and contrast sensitivity than the CVL groups; see Supplementary Table 2 for comparison of the two CVL groups.
↑ Higher scores indicate better performance.
↓ Lower scores indicate better performance.

SDC Table 2. Results of independent t-tests comparing demographics and vision characteristics of central vision loss (CVL) patients without a scotoma (n = 7) and age-matched CVL patients with a scotoma (n = 7).

	Scotoma	Nonscotoma			
	Mean (*SD*) or %	Mean (*SD*) or %	*t*	*df*	*p*-value
Demographics					
Age (years)	53.4 (10.3)	48.8 (16.8)	-0.60	12	0.56
Gender, Male	43%	57%	0.29[a]	1	0.59
Length of Impairment (years)	33.3 (17.8)	39.3 (15.8)	0.69	12	0.50
Vision Measures					
Visual Acuity (logMAR) ↓	0.73 (0.20)	0.60 (0.21)	-1.11	12	0.29
Contrast Sensitivity (log units) ↑	1.34 (0.22)	1.63 (0.37)	1.75	12	0.11

All tests were performed binocularly. CVL in the nonscotoma group was caused by albinism (*n* = 3), infantile nystagmus (*n* = 2), retinopathy of prematurity (*n* = 1) and multifocal choriditis (*n* = 1). CVL in the age-matched scotoma group was caused by juvenile macular dystrophy (n = 3), myopic degeneration (n = 2), Doyne honeycomb retinal dystrophy (n = 1), and optic neuropathy (n = 1).

[a] Chi-square test

↑ Higher scores indicate better performance

↓ Lower scores indicate better performance

SDC Table 3. Analysis of variance for centering gaze perception task measures with age-matched vision groups.

		Horizontal Plane		Vertical Plane	
Source	*df*	*F*	*p*-value	*F*	*p*-value
Straight Ahead Gaze Judgments					
Vision Group (V)	2	2.41	0.11	0.57	0.57
V within-group error	25	(4.96)		(17.34)	
Virtual Head Rotation (HR)	2	19.25	<0.001	57.4	< 0.001
HR x V	4	3.24	0.02	0.28	0.89
HR within-group error	50	(8.71)		(13.24)	
SD Straight Ahead Gaze Judgments					
Vision Group (V)	2	8.24	0.002	17.04	<0.001
V within-group error	25	(17.07)		(11.87)	
Virtual Head Rotation (HR)	2	0.04	0.96	1.61	0.21
HR x V	4	2.73	0.04	1.01	0.41
HR within-group error	50	(2.60)		(1.93)	

Values enclosed in parentheses represent mean square errors. *SD* = standard deviation (variability) of gaze perception task measures.

SDC Table 4. Analysis of variance for decentering gaze perception task measures with age-matched vision groups.

.

Source	*df*	*F*	*p*-value
Gaze Cone Width			
Vision Group (V)	2	2.78	0.08
V within-group error	24	(204.30)	
Spatial Plane (S)	1	4.26	0.05
S x V	2	1.41	0.26
S within-group error	24	(49.22)	
SD Gaze Cone Width			
Vision Group (V)	2	4.63	0.02
V within-group error	24	(46.57)	
Spatial Plane (S)	1	3.16	0.09
S x V	2	1.00	0.39
S within-group error	24	(11.02)	

Values enclosed in parentheses represent mean square errors. *SD* = standard deviation (variability) of gaze perception task measures