

Paper	Experiment	Recording Method	Number of Participants	Eyes - viewing	Eyes - recording	Recording frequency (Hz)	Direction of recording	Analysis Method	Fixation duration [sec]	Targets	Instruction	Min Distance [']	Average Distance [']	Max Distance [']	Min Speed [°/s]	Average Speed [°/s]	Max Speed [°/s]	Mean Acceleration [°/s ²]	Max Acceleration [°/s ²]	Min Duration [ms]	Average Duration [ms]	Max Duration [ms]	Minimum Frequency [1/s]	Average Frequency [1/s]	Maximum Frequency [1/s]	Main Sequence: Axes	
Armington & Bloom, 1974	1	Contact Lens Mirror	3	M	M	N/A	X	criterion size and direction	600	vertically oriented stripes (.26-6.83cyc/°)	/	1	/	12	/	/	/	/	/	/	/	/	/	/	/	/	
Barlow, 1952	1	Hg droplets on cornea	4	/	M	250	/	manual	180-300	point of light	fixate	/	/	/	/	/	/	/	/	/	40	/	0.20	/	/	/	
Beeler, 1967	1	Contact Lens Mirror	2	M	M	/	/	first order differentiator and low-pass filter with a third order cutoff above 40 Hz	3	luminance targets / motion targets	report presence of stimulus since last response collection	/	/	30	/	/	/	/	/	/	/	/	/	/	/	/	
Betta & Turatto, 2006	1	Eyelink II	12	B	M	500	B	Engbert & Kliegl	9	red or green disk	respond to stimuli appearing	/	/	/	/	/	/	/	/	/	/	/	0.20	/	3.40	/	
Betta, Galfano, & Turatto, 2007	1	Eyelink II	26	B	M	500	B	Engbert & Kliegl	varied, ca 3sec	Central fixation dot and horizontal boxes	maintain gaze within imaginary central square	/	/	/	/	/	/	/	/	/	/	/	0.57	1.40	2.54	/	
Boyce, 1967	1	Contact Lens Mirror	4	B/M	M	96	B	velocity filter	60	dotted cross	/	2	5	16	/	/	/	/	/	/	/	/	0	3	5	/	
Bridgeman & Palca, 1980	1	photoelectric technique	7	/	/	/	X	< 15'arc	/	one stationary, one moving electrode	fixate tip of stationary electrode	/	/	/	/	/	/	/	/	/	/	/	0.51	/	1.60	/	
Cherici, Kuang, Poletti, & Rucci, 2012	1	Dual Purkinje Image	14	M	R	1000	B	velocity >3°/s, amplitude >3', validated by humans	5	no marker	maintain accurate fixation	17†	40	67†	/	/	/	/	/	/	/	/	0.16†	1.07	2.14†	/	
Cherici et al., 2012	2	Dual Purkinje Image	14	M	R	1000	B	velocity >3°/s, amplitude >3', validated by humans	5	marker	maintain accurate fixation	8†	20	31†	/	/	/	/	/	/	/	/	0.44†	1.32	2.29†	/	
Cornsweet, 1956	1	Contact Lens Mirror	2	M	M	N/A	X	manual	45	vertical line circular background	/	3	/	7	/	/	/	/	/	/	/	/	0.40	0.95	1.56	/	
Cunitz & Steinman, 1969	1	Contact Lens Optical Lever	2	/	/	500	X	microsaccade size limit of 11.6'	20	single letter / text	fixate / read	/	5.6 - 11.1	12	/	/	/	/	/	/	/	/	2.11†	/	2.7†	/	
de Weese Puckett & Steinman, 1969	1	Contact Lens Optical Lever	2	/	R	200	X	manual	/	green point	fixate	/	/	/	/	/	/	/	/	/	/	/	1.32	1.78/1.59	2.56	/	
de Weese Puckett & Steinman, 1969	2	Contact Lens Optical Lever	2	/	R	200	X	manual	/	green point	hold	/	/	/	/	/	/	/	/	/	/	/	0.18	0.9/63	1.03	/	
Deaner & Platt, 2003	1	Magnetic search coil technique	4	/	M	500	X	acceleration (8°/s for 3 samples onset & 5°/s for 1 sample offset)	.8-1.7	faces	N/A	/	52	/	/	/	/	/	/	/	/	/	/	/	/	/	
Di Stasi et al., 2013 (45)	1	Eyelink 1000	12	B	B	500	B	Engbert & Kliegl	45	air traffic control task	free viewing / fixation	4	/	60	/	/	/	/	/	/	/	/	/	/	/	/	linear - linear
Dimigen, Valsecchi, Sommer, & Kliegl, 2009 (83)	1	IView-X Hi-Speed 1250, SMI	8	B	R	500	B	Engbert & Mergenthaler, 2006	10	black and white checkerboard with five fixation points	maintain perfect fixation	6	17	60	20	48.1 (peak)	110	/	/	/	10	/	/	0.62	/	linear - linear	
Dimigen et al., 2009 (83)	2	IView-X Hi-Speed 1250, SMI	3	B	R	500	B	Engbert & Mergenthaler, 2006	10	.2° fixation point on face	maintain perfect fixation	3	16	54	20	43.9 (peak)	110	/	/	/	10	/	/	0.88	/	linear - linear	
Dimigen et al., 2009 (83)	3	IView-X Hi-Speed 238, SMI	12	B	R	238	B	Engbert & Mergenthaler, 2006	50	.48° white point, intermittent coloured disks	minimise eye blinks and maintain fixation, count oddball colours	2	14	60	3	/	65	/	/	/	/	/	0.20	1.47	6.50	linear - linear	
Ditchburn & Ginsborg, 1953	1	Contact Lens Mirror	2	B	B	N/A	B	Manual	/	Dots / cross	/	5	6.1/5.8	15	/	10	/	/	1000	/	/	/	0.20	.9-1.4	33.33	/	
Ditchburn & Ginsborg, 1953	2	Contact Lens Mirror	1	B	B	N/A	B	manual	5	darkness	/	2	17	45	/	/	/	/	/	/	/	/	0.31	/	10.00	/	
Engbert & Kliegl, 2004	1	Eyelink II	5	B	B	500	B	Engbert & Kliegl	3	black square (7.2')	fixate	/	/	/	/	/	/	/	/	/	/	/	0.80	/	1.90	/	

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Engbert & Kliegl, 2003	1	SMI Eyelink System	30	B	B	250	B	Engbert & Kliegl	3.5-4.5	cross - arrow cue -target	saccade to target / button press	/	32	/	/	/	/	/	/	/	/	/	0.13	1.27	4.00	log. - log.	
Engbert & Kliegl, 2003	2	SMI Eyelink System	30	B	B	250	B	Engbert & Kliegl	3.5-4.5	cross - colour change - target	saccade to target / button press	/	/	/	/	/	/	/	/	/	/	/	0.20	/	1.90	log. - log.	
Engbert & Kliegl, 2003	3	SMI Eyelink System	20	B	B	250	B	Engbert & Kliegl	3.5-4.5	cross - colour change / arrow	respond to offset of cue	/	/	/	/	/	/	/	/	/	/	/	0.20	/	3.10	log. - log.	
Engbert & Mergenthaler, 2006	1	Eyelink II	29	B	B	500	B	Engbert & Kliegl	3	black square (7.2')	keep eyes on fixation target and not blink	1	/	60	4	/	100	/	/	/	/	/	/	1.13	/	log. - log.	
Engbert & Mergenthaler, 2006	2	Eyelink II	17	B	B	500	B	Engbert & Kliegl	20	black square (7.2')	keep eyes on fixation target and not blink	/	/	60	/	/	/	/	/	/	/	/	/	1.21	/	log. - log.	
Fried et al., 2014 (36)	1	Eyelink 1000	22	B	D	500	B	> 6msec; linear in 30° window; velocity >10°/s; amplitude >.1°	2	white fixation dot, grex boy with dark square	respond to target appearance	6	/	192	/	/	/	/	/	/	/	/	/	0.40	2.25	5.20	linear - linear
Gaarder, 1960	1	Contact Lens Mirror	1	/	/	N/A	B	manual	45	complex shapes	fixate on specific point of shape	1	/	30	/	/	/	/	/	/	/	/	/	/	/	/	
Galfano, Betta, & Turatto, 2004	1	Eyelink II	13	B	B	500	B	Engbert & Kliegl	2.3	changing boxes	/	4	/	60	/	/	/	/	/	/	/	/	0.30	1.20	2.40	linear - linear	
Haddad & Steinman, 1973	3	Contact Lens Optical Lever	/	/	/	12	B	computer	7	dots	make smallest voluntary saccade	3	11.4 / 10.6	13	/	/	/	/	/	/	/	/	/	0.04	/	/	
Hafed & Clark, 2002	1	ISCAN	14	/	/	240	X	> .12° & < 1°, main sequence, velocity > 8°/s	/	pro cue task	/	7	/	60	8	/	100	/	/	/	/	/	/	/	/	log. - log.	
Hafed & Clark, 2002	2	ISCAN	13	/	/	240	X	> .12° & < 1°, main sequence, velocity > 8°/s	/	anti cue task	/	7	/	60	8	/	100	/	/	/	/	/	/	/	/	log. - log.	
Hipp & Siegel, 2013 (61)	1	EOG	24	B	B	1000	/	/	1.52	central cross, two moving peripheral bars	report nature of ambiguous stimulus	/	/	/	/	/	/	/	/	/	/	/	0.10	/	2.20	/	
Ko, Poletti, & Rucci, 2010 (137)	1	Dual Purkinje Image	6	/	/	1000	B	velocity > 3°/sec & larger than 1 min arc	17.5	threading a needle	threading a needle	/	19	108	/	/	/	/	/	/	/	/	0.30	0.10	0.80	/	
Ko et al., 2010 (137)	2	Dual Purkinje Image	6	/	/	1000	B	velocity > 3°/sec & larger than 1 min arc	17.5	fixating a needle	fixating a needle	/	20	168	/	/	/	/	/	/	/	/	0.40	0.14	0.80	/	
Krauskopf, Cornsweet, & Riggs, 1960	1	Contact Lens Mirror	2	B	B	0.5	X	manual	300	/	/	1	1.55 - 3.96	6	/	/	/	/	/	/	/	/	/	/	/	/	
Kuang, Poletti, Victor, & Rucci, 2012 (80)	1	Dual Purkinje Image	14	R	R	1000	B	speed > 3°/s, amplitude > 3' and < 30'	10	greyscale pictures of natural scenes	memorise image	3	/	30	/	/	/	/	/	/	/	/	0.05	0.17	0.50	/	
Laubrock, Kliegl, Rofls, & Engbert, 2010 (35)	1	Eyelink II	20	/	/	500	B	Engbert & Mergenthaler	3-4.5	fixation cross and peripheral disk	manual / saccadic response to target	1	15	60	/	/	/	/	/	/	/	/	/	/	/	/	
Laubrock, Engbert, & Kliegl, 2008	1	Eyelink II	16	B	B	500	B	Engbert & Kliegl	20.2-23.9	horizontally and vertically moving dots & ventral grey fixation dot	report motion direction	/	25	60	/	/	/	/	/	/	/	/	0.40	/	1.50	/	
Laubrock et al., 2008	2	Eyelink II	23	B	B	500	B	Engbert & Kliegl	2.55	horizontally moving dots & central grey fixation dot	report motion direction	/	/	60	/	/	/	/	/	/	/	/	0.10	/	1.40	/	
Laubrock, Engbert, & Kliegl, 2005	1	Eyelink II	32	B	B	500	B	Engbert & Kliegl	3.1-5.1	.03° disk and peripheral flash cues and brief Landolt ring target	/	3	22	90	/	/	/	/	/	/	/	/	0.10	/	2.30	/	
Martinez-Conde, Macknik, Troncoso, & Dyar, 2006	1	Eyelink II	8	B	B	500	B	Martinez-Conde 2000	30	.05° red fixation dot, peripheral gabor target (9°)	fixate, button press when fading	1	14	120	3	/	40	/	/	/	/	/	3.20	/	4.50	log. - log. & linear - linear	

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Martinez-Conde et al., 2006	2	Eyelink II	6	B	B	500	B	Martinez-Conde 2000	30	.05° red fixation dot, peripheral gabor target (3°/6°)	fixate, button press when fading	/	/	/	/	/	/	/	/	/	/	/	/	/	log. - log. & linear - linear	
Martinez-Conde et al., 2006	3	Eyelink II	7	B	B	500	B	Martinez-Conde 2000	30	.05° red fixation dot, peripheral gabor target	fixate, button press when fading	1	/	120	3	/	40	/	/	/	/	/	/	/	log. - log. & linear - linear	
McCamy et al., 2012 (71)	1	Eyelink 1000	6	B	B	500	B	Engbert & Kliegl	30	.05° red spot and peripheral fading stimulus	fixate and report fading	2	/	60	5	/	140	/	/	/	20	/	0.50	1.07	2.60	linear - linear
McCamy, Otero-Millan, Di Stasi, Macknik, & Martinez-Conde, 2014 (44)	1	Eyelink II	8	B	B	500	B	Engbert & Kliegl	45	blank scene	free viewing / fixation	/	/	/	/	/	/	/	/	/	/	/	0.13	/	0.25	linear - linear
McCamy et al., 2014 (44)	2	Eyelink II	8	B	B	500	B	Engbert & Kliegl	45	natural scene	free viewing	5	/	60	/	/	/	/	/	/	/	/	0.10	/	1.30	linear - linear
McCamy et al., 2014 (44)	3	Eyelink II	8	B	B	500	B	Engbert & Kliegl	45	picture puzzle	find differences	5	/	60	/	/	/	/	/	/	/	/	0.10	/	1.20	linear - linear
McCamy et al., 2014 (44)	4	Eyelink II	8	B	B	500	B	Engbert & Kliegl	45	Where's Waldo	find Waldo	5	/	60	/	/	/	/	/	/	/	/	0.10	/	1.20	linear - linear
McCamy et al., 2013 (31)	1	Eyelink 1000	17	B	B	500	B	Engbert & Kliegl	30	circular target		6	/	120	/	/	/	/	/	/	/	/	1.00	/	1.31	linear - linear
Møller, Laursen, Tygesen, & Sjølie, 2002	1	SMI Eyelink System	10	B	B	250	B	Velocity > 5 °/s; acceleration > 2,500 °/s ² ; overshoot	40	black cross on white (1.39°)	fixate on centre of cross	6	12.72 - 65.88	150	/	19 - 40	28 - 98	2322 - 6440	/	/	/	/	0.23†	0.61	0.93†	linear - linear
Møller, Laursen, & Sjølie, 2006	1	SMI Eyelink System	10	B	B	250	B	Velocity > 5 °/s; acceleration > 2,500 °/s ² ; overshoot	40	black cross on white (1.39°)	fixate on centre of cross	14†	/	65†	5	/	/	/	/	/	/	/	/	/	/	/
Nachmias, 1959	1	Contact Lens Optical Lever	2	M	M	N/A	B	manual	30	crosshairs (1.4')	/	/	/	/	/	/	/	/	/	/	/	/	/	2.14	/	/
Nachmias, 1961	1	Contact Lens Optical Lever	2	M	M	N/A	B	manual	30	crosshairs (1.4')	maintain same passive attitude when target is present / not	1†	/	8†	/	/	/	/	/	/	/	/	/	/	/	/
Otero-Millan et al., 2011 (67)	1	search coil/ Eyelink II	14	/	M/B	500	B	Engbert & Kliegl	10-120	.1° red spot / red cross	sustain steady fixation	/	28	/	3	39 (peak)	300	/	/	/	/	/	/	1.10	/	linear - linear
Otero-Millan, Macknik, Langston, & Martinez-Conde, 2013 (45)	1	Eyelink 1000	10	B	B	500	B	Engbert & Kliegl	30	natural greyscale images / grey box / red fixation dot	free viewing / fixation	5	/	/	/	/	/	/	/	/	/	/	/	1.30	/	/
Otero-Millan et al., 2013 (45)	2	Eyelink II	6	B	B	500	B	Engbert & Kliegl	30	larger natural greyscale images /red fixation dot	fixate / freely explore including head motion	5	/	/	/	/	/	/	/	/	/	/	/	1.30	/	/
Otero-Millan, Troncoso, Macknik, Serrano-Pedraza, & Martinez-Conde, 2008	A	Eyelink II	8	B	B	500	B	Engbert & Kliegl	45	red cross (.75°)	fixate	2	25	60	10	/	42	/	/	4	13	34	/	0.80	/	linear - linear
Otero-Millan et al., 2008	B	Eyelink II	8	B	B	500	B	Engbert & Kliegl	45	naturalistic images	fixate	2	26	60	10	/	44	/	/	4	13	34	/	0.80	/	linear - linear
Otero-Millan et al., 2008	C	Eyelink II	8	B	B	500	B	Engbert & Kliegl	45	Picture Puzzle	fixate	2	26	60	10	/	43	/	/	4	13	34	/	0.80	/	linear - linear
Otero-Millan et al., 2008	D	Eyelink II	8	B	B	500	B	Engbert & Kliegl	45	Where's Waldo	fixate	2	25	60	10	/	41	/	/	4	13	34	/	0.80	/	linear - linear

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Otero-Millan, Macknik, & Martinez-Conde, 2012 (28)	1	Eyelink 1000	8	B	B	500	B	Enbert & Kliegl	30	central red fixation dot and peripheral rotating snake illusion	report transitions in motion	3	30	153	15	28 (peak)	200	/	/	4†	5	12†	0.48†	0.80	1.3†	linear - linear	
Pastukhov & Braun, 2010 (63)	1	Eyelink 2000	5	B	B	1000	B	Engbert & Kliegl	4.82	fixation cross and peripheral targets	report letter identity or colour	4	/	140	/	/	/	/	/	/	/	/	0.01	/	0.80	log. - log.	
Pastukhov & Braun, 2010 (63)	2	Eyelink 2000	5	B	B	1000	B	Engbert & Kliegl	4.32	fixation cross and peripheral targets	report letter identity	/	/	/	/	/	/	/	/	/	/	/	0.01	/	1.12	log. - log.	
Pastukhov & Braun, 2010 (63)	3	Eyelink 2000	5	B	B	1000	B	Engbert & Kliegl	4.19	central targets	report letter identity or colour	/	/	/	/	/	/	/	/	/	/	/	0.01	.26/.12	2.24	log. - log.	
Poletti & Rucci, 2010 (47)	1	Dual Purkinje Image	11	R	R	1000	B	velocity>3°/s, amplitude<30'	10	movie of natural scene greyscale image fading	/	6	19	56	/	/	/	/	/	/	/	/	/	0.50	1.20	2.10	/
Poletti & Rucci, 2010 (47)	2	Dual Purkinje Image	11	R	R	1000	B	velocity>3°/s, amplitude<30'	10	movie of natural scene greyscale image fading	/	6	20	56	/	/	/	/	/	/	/	/	/	1.30	/	/	
Poletti & Rucci, 2010 (47)	3	Dual Purkinje Image	11	R	R	1000	B	velocity>3°/s, amplitude<30'	10	natural greyscale image under retinal stabilisation	/	6	21	54	/	/	/	/	/	/	/	/	/	1.10	/	/	
Ratliff & Riggs, 1950	1	Contact Lens Mirror	5	R	R	N/A	B	manual	2-4	fixation point (3.45') / cross	fixate steadily	2	6	26	/	/	/	/	/	/	/	/	0.29	/	5.00	/	
Rattle & Foley-Fisher, 1968	1	Scleral reflection / Contact Lens Optical Lever	9	R	L	N/A	X	manual	15	vernier targets 1° length	vernier task	2	/	/	/	/	/	/	/	/	/	/	0.38	/	1.25	/	
Rolfs, Engbert, & Kliegl, 2004	1	Eyelink II	22	B	B	500	B	Engbert & Kliegl	2.6-3.6	central spot	respond to cues	/	/	60	/	/	/	/	/	/	/	/	0.18	/	0.70	/	
Rolfs, Engbert, & Kliegl, 2005	1	Eyelink II	28	B	B	500	B	Engbert & Kliegl	2.1-3.1	fixation ring .8° outside, .1° inside	target colour judgement	/	/	/	/	/	/	/	/	/	/	/	0.40	0.80	1.40	/	
Rolfs et al., 2005	2	Eyelink II	28	B	B	500	B	Engbert & Kliegl	2.1-3.1	fixation ring .8° outside, .1° inside	reply to target pitch	/	/	/	/	/	/	/	/	/	/	/	0.40	1.20	1.80	/	
Rolfs et al., 2005	3	Eyelink II	25	B	B	500	B	Engbert & Kliegl	2.1-3.1	fixation ring .8° outside, .1° inside	cross of visual and auditory cues	/	/	/	/	/	/	/	/	/	/	/	0.20	1-1.2	1.50	/	
Rolfs, Kliegl, & Engbert, 2008	1	Eyelink II	60	B	B	500	B	Engbert & Kliegl	1.1-3.1	fixation ring .8° outside, .1° inside	auditory or visual cue task	6	/	18	/	/	/	/	/	/	/	/	0.30	/	2.00	/	
Rolfs, Kliegl, & Engbert, 2008	2	Eyelink II	27	B	B	500	B	Engbert & Kliegl	1.1-3.1	fixation ring .8° outside, .1° inside	auditory or visual cue task	7	/	16	/	/	/	/	/	/	/	/	0.20	/	2.70	/	
Rolfs, Laubrock, & Kliegl, 2006	1	Eyelink II	31	B	B	500	B	Engbert & Kliegl	2.5	point	respond to cues	/	/	/	/	/	/	/	/	/	/	/	0.20	1.00	2.00	/	
Rucci & Desbordes, 2003	1	Dual Purkinje Image	4	/	/	1000	B	velocity threshold: 10°/sec	2	bars with noise	reply to orientation of bar	18†	27	38†	/	/	/	/	/	/	/	/	0.95	1.50	2.25	/	
Rucci & Desbordes, 2003	2	Dual Purkinje Image	4	/	/	1000	B	velocity threshold: 10°/sec	0.5	bars with noise	reply to orientation of bar	18†	27	40†	/	/	/	/	/	/	/	/	0.20	0.40	0.60	/	
Sabrin & Kertesz, 1980	1.1	Dual Purkinje Image	2	B	B	120	B	<4minarc, shorter than 50msec	45	annulus, with different polarity to each eye	indicate rivalry	/	/	/	/	/	/	/	/	/	/	/	1.31	/	1.43	/	
Sabrin & Kertesz, 1980	1.2	Dual Purkinje Image	2	B	B	120	B	<4minarc, shorter than 50msec	45	annulus, with different polarity to each eye	indicate rivalry	/	/	/	/	/	/	/	/	/	/	/	1.95	/	2.26	/	
Sansbury, Skavenski, Haddad, & Steinman, 1973	1	Contact Lens Optical Lever	2	R	R	N/A	B	/	30	1.3° white disk	maintain fixation after target removed	8	/	9	/	/	/	/	/	/	/	/	2.10	/	2.50	/	
Sansbury et al., 1973	2,3,4	Contact Lens Optical Lever	2	R	R	N/A	B	/	30	4 disks	maintain fixation after target removed	10	/	24	/	/	/	/	/	/	/	/	1.40	/	2.40	/	
Sansbury et al., 1973	5,6	Contact Lens Optical Lever	2	R	R	N/A	B	/	30	two disks	maintain fixation after target removed	16	/	21	/	/	/	/	/	/	/	/	1.90	/	2.50	/	

Paper	Experiment	Recording Method	Number of Participants	Eyes - viewing	Eyes - recording	Recording frequency (Hz)	Direction of recording	Analysis Method	Fixation duration [sec]	Targets	Instruction	Min Distance [']	Average Distance [']	Max Distance [']	Min Speed [°/s]	Average Speed [°/s]	Max Speed [°/s]	Mean Acceleration [°/s ²]	Max Acceleration [°/s ²]	Min Duration [ms]	Average Duration [ms]	Max Duration [ms]	Minimum Frequency [1/s]	Average Frequency [1/s]	Maximum Frequency [1/s]	Main Sequence: Axes	
Sansbury et al., 1973	7	Contact Lens Optical Lever	2	R	R	N/A	B	/	30	darkness	maintain fixation after target removed	32	/	40	/	/	/	/	/	/	/	/	1.80	/	2.00	/	
Schor & Hallmark, 1978	1	infrared eye movement detector	1	M	M	/	X	/	40	points	fixate alternately	/	8	/	/	/	/	/	/	/	/	/	0.60	/	/	/	
Schulz, 1984	1	Contact Lens Mirror	6	B	B	200	B	/	10.25	snellen target	/	3	/	50	8	/	35	/	/	16	/	25	1.00	/	3.00	linear - linear	
Siegenthaler et al., 2014 (51)	1	Eyelink 1000	11	B	B	500	B	Engbert & Kliegl	180	black dot	control task	6	27	120	10	/	170	/	/	/	/	/	/	1.35	/	linear - linear	
Siegenthaler et al., 2014 (51)	2	Eyelink 1000	11	B	B	500	B	Engbert & Kliegl	180	black dot	easy arithmetic	6	34	120	10	/	170	/	/	/	/	/	/	1.53	/	linear - linear	
Siegenthaler et al., 2014 (51)	3	Eyelink 1000	11	B	B	500	B	Engbert & Kliegl	180	black dot	difficult arithmetic	6	42	120	10	/	170	/	/	/	/	/	/	1.13	/	linear - linear	
Simon, Schulz, Rassow, & Haase, 1984	1	Contact Lens Mirror	/	B	B	2000	B	/	10.24	snellen target	/	5	/	32	/	/	35	/	/	/	/	/	/	2.10	/	/	
Snodderly, 1987	1 (in light)	Dual Purkinje Image	2	B	R	200	B	/	>1.4	spot dimming	report when spot disappears	/	5 - 10.11	18	/	/	/	/	/	/	/	/	/	0.13	/	1.66	/
Snodderly, 1987	2 (in dark)	Dual Purkinje Image	2	B	R	200	B	/	>1.4	spot dimming	report when spot disappears	/	8 - 11.8	20	/	/	/	/	/	/	/	/	/	0.15	/	0.61	/
Steinman, 1965	1&2	Contact Lens Mirror	2	R	R	N/A	B	/	30	concentric targets: different sizes & luminances	/	/	/	/	/	/	/	/	/	/	/	/	1.25	/	2.15	/	
Steinman & Cunitz, 1968	1	Contact Lens Optical Lever	2	/	M	/	B	/	10 / 45	disk of scotopic tunsten light, 5.4'	maintain fixation	5†	23 - 39	82†	/	/	/	/	/	/	/	/	/	/	/	/	
Steinman, Cunitz, Timberlake, & Herman, 1967	1	Contact Lens Optical Lever	2	/	/	/	B	/	9.8	white light	fixate	/	8	/	/	/	/	/	/	/	/	/	0.86	/	1.47	/	
Steinman et al., 1967	2	Contact Lens Optical Lever	2	/	/	/	B	/	9.8	white light	hold	/	/	/	/	/	/	/	/	/	/	/	0.33	/	0.57	/	
Steinman, Skavenski, & Sansbury, 1969	1	Contact Lens Optical Lever	2	/	/	/	B	/	/	white light	fixate	2	/	10	/	/	/	/	/	/	/	/	1.13	/	2.15	/	
Steinman et al., 1969	2	Contact Lens Optical Lever	2	/	/	/	B	/	/	white light	hold	2	/	10	/	/	/	/	/	/	/	/	0.10	/	0.35	/	
Thaler, Schütz, Goodale, & Gegenfurtner, 2013 (45)	1&2	Eyelink II	12	B	M	250	B	Engbert & Kliegl	17	range of fixation targets	keep gaze directed at centre as stable as possible	2	11	60	/	/	/	/	/	/	/	/	1.65	/	1.80	/	
Troncoso, Macknik, & Martinez-Conde, 2008	1	Eyelink II	6	B	B	500	B	Engbert & Kliegl	/	small spot	fixate, report on visibility of artificial scotoma	2	25	180	/	41 (peak)	100	/	/	2	13	101	0.20	0.70	2.00	log. - log.	
Tse, Baumgartner, & Greenlee, 2010 (31)	2	Limbus tracker	8	/	R	1000	B	zero crossing in velocity space between 10 and 100ms and not in top 5% of distance	445	black fixation point on checkerboard image	maintain fixation	0	/	83	6	/	50	/	/	/	/	/	/	/	/	log. - log.	
Turatto, Valsecchi, Tamè, & Betta, 2007	1	Eyelink II	25	B	B	500	B	Engbert & Kliegl	1.5	green or red diamond array	visual search	/	/	/	/	/	/	/	/	/	/	/	0.10	/	1.10	/	
Valsecchi & Turatto, 2009	1	Eyelink II	22	B	B	500	B	Engbert & Kliegl	38	white fixation point (.5°)	count rare auditory signal	/	/	/	/	/	/	/	/	/	/	/	0.25	/	1.40	/	
Valsecchi & Turatto, 2009	2	Eyelink II	22	B	B	500	B	Engbert & Kliegl	12	green or red circles (2°)	count rare auditory or visual signal	/	/	/	/	/	/	/	/	/	/	/	0.10	/	3.00	/	
Valsecchi & Turatto, 2009	3	Eyelink II	12	B	B	500	B	Engbert & Kliegl	12	green or red circles (2°)	count rare auditory or visual signal	/	/	/	/	/	/	/	/	/	/	/	0.05	/	2.80	/	
Valsecchi & Turatto, 2007	1	Eyelink II	15	B	B	500	B	Engbert & Kliegl	10.98	white circle (.5°) on green or red circles (2°)	respond to oddball	/	/	/	/	/	/	/	/	/	/	/	0.10	/	2.75	/	

Paper	Experiment	Recording Method	Number of Participants	Eyes - viewing	Eyes - recording	Recording frequency (Hz)	Direction of recording	Analysis Method	Fixation duration [sec]	Targets	Instruction	Min Distance [°]	Average Distance [°]	Max Distance [°]	Min Speed [°/s]	Average Speed [°/s]	Max Speed [°/s]	Mean Acceleration [°/s ²]	Max Acceleration [°/s ²]	Min Duration [ms]	Average Duration [ms]	Max Duration [ms]	Minimum Frequency [1/s]	Average Frequency [1/s]	Maximum Frequency [1/s]	Main Sequence: Axes
Valsecchi & Turatto, 2007	2	Eyelink II	6	B	B	500	B	Engbert & Kliegl	10.98	white circle (.5°) on blue or red circles (2°)	respond to oddball	/	/	/	/	/	/	/	/	/	/	/	0.10	/	2.60	/
Valsecchi, Betta, & Turatto, 2007	1	Eyelink II	17	B	B	500	B	Engbert & Kliegl	10	white fixation, peripheral coloured disks	maintain gaze	2	/	90	3	/	290	/	/	/	/	/	0.73	1.544 - 1.797	3.10	linear - linear
Valsecchi et al., 2007	2	Eyelink II	20	B	B	500	B	Engbert & Kliegl	20	white fixation, central coloured disks	maintain gaze	2	/	90	3	/	290	/	/	/	/	/	0.25	1.251 - 1.269	2.90	linear - linear
Winterson & Collewijn, 1976	1	Search coil	7	/	/	66.67	B	/	N/A	rifle / needle	fixate	1	7	20	/	/	/	/	/	/	/	/	1.27	2.04	2.58	/
Winterson & Collewijn, 1976	1	Search coil	7	/	/	66.67	B	/	N/A	rifle, target	shoot	1	7	30	/	/	/	/	/	/	/	/	0.83	1.19	1.57	/
Winterson & Collewijn, 1976	1	Search coil	7	/	/	66.67	B	/	N/A	needle and thread	thread	1	7	60	/	/	/	/	/	/	/	/	0.08	1.25	1.78	/
Winterson & Collewijn, 1976	1	Search coil	7	/	/	66.67	B	/	N/A	rifle / needle	suppress	/	7	/	/	/	/	/	/	/	/	/	0.09	0.51	0.87	/
Yuval-Greenberg, Tomer, Keren, Nelken, & Deouell, 2008	2	Eyelink II	3	B	B	500	B	Engbert & Kliegl	2-3	images of common objects with bars masking them, either shuffled or normal appearance	respond to rare target	/	/	100	/	/	200	/	/	/	/	/	0.10	/	9.00	/
Yuval-Greenberg, Merriam, & Heeger, 2014	1	Eyelink 1000	8	/	/	1000	B	Engbert & Mergenthaler	2.6	8 grating patches around centre of screen	discriminate orientation	5	/	60	10	/	100	/	/	/	/	/	/	/	/	log. - log.
Yuval-Greenberg et al., 2014	2	Eyelink 1000	8	/	/	1000	B	Engbert & Mergenthaler	2.6	8 grating patches around centre of vision	discriminate orientation	6	/	186	/	/	/	/	/	/	/	/	/	/	/	log. - log.
Zuber & Stark, 1965	1	Limbus tracker	1	L	L	/	B	/	/	grid	/	2	/	13	3	/	14	/	/	/	/	/	/	/	/	log. - log. & linear - linear

Notes: Articles listed here that were published after the review by Rolfs (2009) were retrieved on the 8th October 2018. Behind the authors' names and publication date the number of citations at retrieval from Scopus is given.

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