

Contrast Sensitivity Test

The Hamilton - Veale Contrast Sensitivity Test

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Instructions

The Hamilton–Veale contrast sensitivity chart has 8 lines of 4 letters. The letters are grouped in pairs. The 2 letters on the left have a greater contrast than the 2 letters on the right of the same line.

1. Hold the chart up one metre from the patient.
2. Ensure uniform illumination.
3. Occlude one eye.
4. Patient to read letters across left to right and down the lines.
5. The threshold is the last group of 2 letters, at the same level, that are both correctly identified.
Record level achieved.
6. Repeat for other eye and record.
7. Repeat with two eyes open and record.

Contrast Level			Log Contrast Sensitivity	Contrast Percentage Threshold	Contrast Sensitivity	Webber Contrast Threshold
			$\log(I/c)$	$P=100c$	I/c	$\Delta L/L$
NV	1	Black on White White on White	0.00	100.0	1.00	1.000
LT	2		0.15	70.9	1.41	0.709
CH	3		0.30	50.0	2.00	0.500
EL	4		0.45	35.5	2.82	0.355
ZO	5		0.60	25.1	3.98	0.251
PY	6		0.75	17.8	5.62	0.178
NA	7		0.90	12.6	7.94	0.126
DH	8		1.05	8.9	11.22	0.089
XO	9		1.20	6.3	15.85	0.063
RF	10		1.35	4.5	22.39	0.045
TC	11		1.50	3.2	31.62	0.032
NV	12		1.65	2.2	44.67	0.022
LA	13		1.80	1.6	63.10	0.016
YZ	14		1.95	1.1	89.13	0.011
EL	15		2.10	0.8	125.89	0.008
KN	16		2.25	0.6	177.83	0.006

Explanation

- Contrast Level

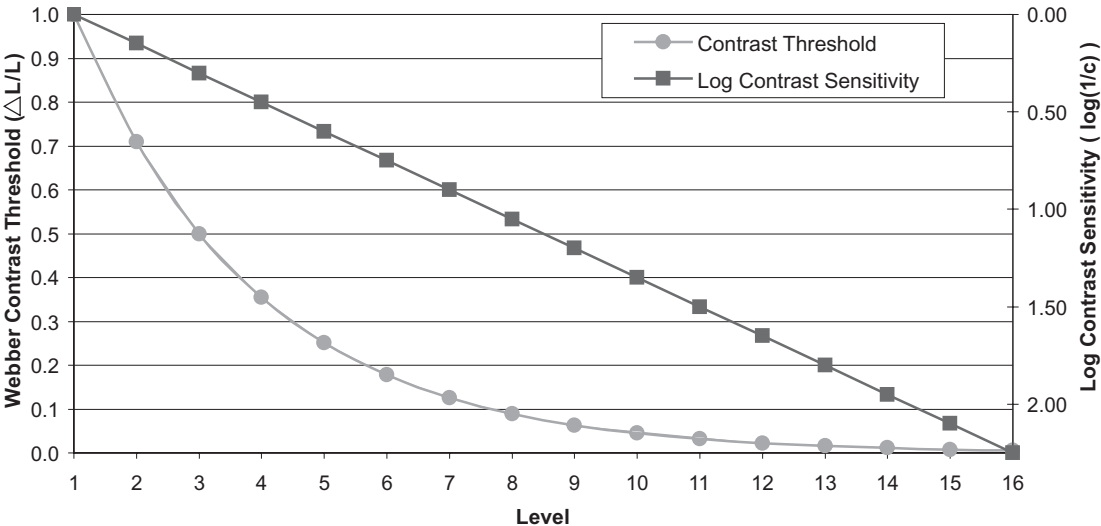
Level that defines the amount of contrast detectable. Level 1 corresponds to black lettering on a white background. Level 16 corresponds to almost white lettering on a white background.
- Log Contrast Sensitivity

The base-10 logarithm of the contrast sensitivity.
- Contrast Percentage Threshold

The percentage of contrast detectable. Black lettering on a white background corresponds to 100%. Almost white lettering on a white background corresponds to 0.6%.
- Contrast Sensitivity

The reciprocal of the contrast threshold.
- Webber Contrast Threshold

The amount of contrast detectable.



Level					Level
1	N	V	L	T	2
3	C	H	E	L	4
5	Z	O	P	Y	6
7	N	A	D	H	8
9	X	O	R	F	10
11	T	C	N	V	12
13	L	A	Y	Z	14
15	E	L			16