Worksheets for choosing a lighted stand magnifier/spectacle add combination

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All magnification measurements were made using methods discussed in the ***Visibility*** article, "Stand Magnifier Optical Strategies," (volume 12, issue 1)

Choosing a lighted stand magnifier/ spectacle add combination

1) Assume the required near magnification is the spectacle add providing 1M (newsprint) continuous text acuity, divided by four.

2) Choose the best non-lighted stand magnifier/spectacle add combination by demonstrating relevant combinations from this chart.

Non-lighted stand/add combos		
3X	Reizen hollow-dome/+3add	
4X	Reizen hollow-dome/+4add	Coil 5428/+5add
5X	Reizen hollow-dome/+5add(max)	Coil 5428/+6add
6X	Coil 5123/+2.5add	Coil 5428/+7add(max)
7X	Coil 5123/+3add(max)	Agfa "8X"/+3.5add
8X	Coil 4210/+2add(max)	Agfa "8X"/+4add(max)
10X	Coil 4212/+2add(max)	Peak "10X"/+5add(max)

3) Choose the preferred stand lighting using just readable font with the following optically equivalent lighted stand magnifier/spectacle add combinations.

Bright LED	ILA* "8X" c+2 Add (max)
Dim LED	Coil "8.7X" c+2 Add (max)
Incandscent	Coil "8.7X" c+2 Add (max)

* ILA - "Independent Living Aids"

4) Due to the enhanced contrast produced, bright LED lighted stands are normally preferred, unless glare is a significant factor. Bright LED lighted stands have optically equivalent non-lighted stands as indicated by the following chart, making their selection relatively straightforward.

Optically equivalent stands			
Non-lighted	**Bright LED**	**Dim LED**	**Incandescent**
Reizen hollow-dome	ILA "4X"		
Coil 5428	ILA "5X"		
Coil 5123	ILA "7X"		
Agfa "8X"	PowerMag "8X"		
Coil 4210	ILA "8X"	Coil "8.7X"	Coil "8.7X"
Coil 4212	ILA "10X"	Coil "10.1X"	Coil "10.1X"
Peak "10X"			Peak "10X"

5) Lower powered dim or incandescent lighted stands do not have optically equivalent non-lighted stands, and must be chosen apart from non-lighted stands, using the following table.

Focused magnification	**Coil "4.7X"**	**Coil "5.4X"**	**Coil "7.1X"**
3X	+2.7 add		
4X	+3.5 add		
4.5X	+4 add (max)	+2.5 add	
5X		+2.7 add	+2.9 add
5.5X		+3 add (max)	+3.1 add
6X			+3.4 add
7X			+4 add (max)