





The Journey Designing the most optically precise and cosmetically appealing eyewear goes beyond common myths and optical roulette. Instead, it requires a knowledge of both geometric, and applied optics and a sense of cosmetic appeal. This careful lens cosmesis allows us to Master Light... Phernell Walker, MBA, LDO, ABOM 4

Emmetropia Vs. Ametropia Emmetropia Ametropia • Emmetropia = ideal Refractive error • Axial length = 24 mm · Light fails to focus images = 62.00 D Power on the fovea centralis • The lens system focuses Patient experiences light on the fovea centralis, blurred vision where an image forms Copyright 2003-2022: Phernell Walker, MBA, LDO, ABOM





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	ncreasir	ng Refracti	ive Index
Cur	rent Base Curve	New Substrate	Flatten BC
	1.498n	1.549n	7.5%
	1.498n	1.60 n	15.0%
	1.498n	1.65n	20.0%
	1.498n	1.70 n	25.0%
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Len	s Designs for Drill Mounts
Rimless eyes lens that car	wear - Fashion demands have challenged technology to create a n handle drill mounts
Lenses are s	ecured by only two points of tension for each lens
Traditional l	enses cannot handle the stress of drill mounted eyewear
Polycarb is in needed for I	mpact resistant but not heat resistant and lacks 3D integrity DM
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Refractive Index	=	1.67_{n} and 1.74_{n}
Abbe Value	=	42 and higher
Center Thickness	=	1.0mm
Specific Gravity	=	1.36 (gcm³)

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- Opposite of pantoscopic tilt
- Angle formed when the top of the eyewire is closer to the patient's face
 than the bottom eyewire
- Producing a retroscopic tilt is not recommended











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