

PRODUCT NOTE

# Beam Mixing Diffusers

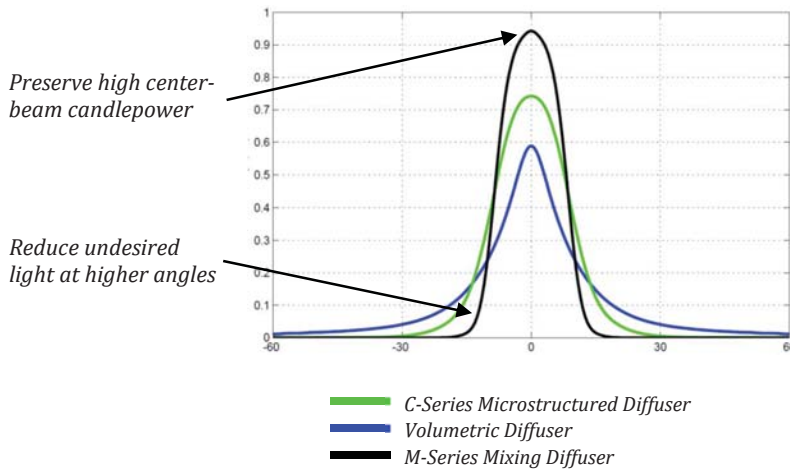
M-Series for Downlight, Spot, and Flood applications



M-Series diffusers are used in spot and narrow flood lighting to smooth beam artifacts caused by parabolic, Fresnel, or TIR lens collimators without significant broadening. The unique mixing design provides superior far-field smoothing and color mixing with high on-axis brightness. Compared with traditional diffusers, M-series diffusers maintain higher central beam candlepower (CBCP), and produce less undesirable “field light” at higher angles.



Product	Typical Transmission (narrow collimated light)	Use for lights with angles in the range of	Comments
<b>NEW</b> M-PR03	90 – 96 %	0° – 20°	Provides smooth spot on work surface with minimal widening and minimal brightness penalty.
<b>NEW</b> M-PR04	90 – 96 %	0° – 20°	
<b>NEW</b> M-PR05	90 – 96 %	8° – 20°	
M-PR10	89 – 95 %	15° – 30°	
M-PR15	88 – 94 %	20° – 50°	



Spot From Collimated Light (no diffuser)



Collimated Light with M-Series Mixing Diffuser

**Usage Notes:**

- M-Series diffusers may be used in either orientation. Bright View recommends using the microstructures facing *toward* the LEDs or lamps
- Choose the minimum-strength M-Series diffuser that provides the needed smoothing
- M-Series diffusers do not have focusing power – they are designed for use in conjunction with parabolic, Fresnel, TIR, or other collimation optics
- Bright View applications engineers can assist with product choices and help your design achieve peak performance

Angles and transmissions are typical; they vary greatly depending on luminaire design