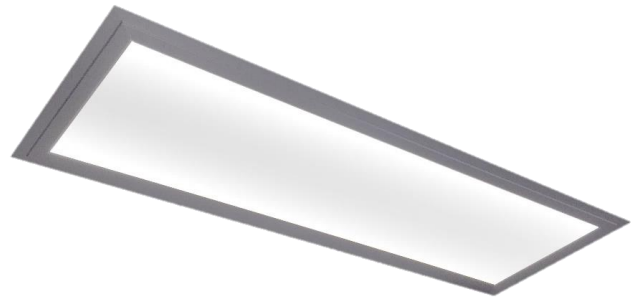
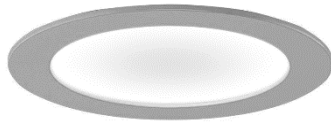


BrightGuide-Flex™ Light Guide Plates

For Edge-Lit Luminaires



BrightGuide-Flex™ Light Guide Plates (LGP) provide a commercially available off-the-shelf flexible solution for edge-lit luminaires. BrightGuide-Flex™ LGPs are made from typical microstructures and can be cut to fit a wide range of lighting applications with quick turnaround and no tooling charges.

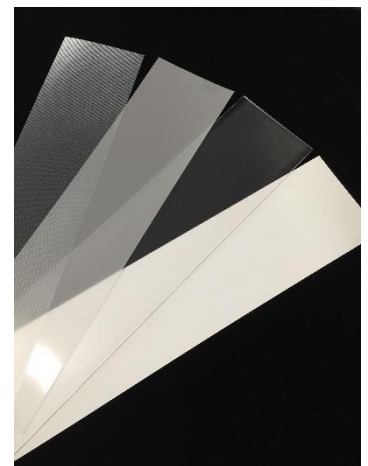


Using its proprietary microstructure technology, Bright View has designed the BrightGuide-Flex™ LGP product family to eliminate the need for custom tooling and associated expense and long design cycles. Each BrightGuide-Flex™ LGP product uses fixed-density microstructures and is useful over a specified range of widths.

When combined with BrightWhite reflectors and angle-management products, a wide range of possibilities emerge for managing light, including ideal up/down distributions, batwing and delta distributions, Lambertian illumination, and cove/wall wash distributions.

Within the prescribed range of widths (specifically, distance between opposing LEDs) there is a tradeoff between efficiency and uniformity on the surface of the LGP – the narrower the width the better the uniformity. However, the efficiency may decrease because light launched into one end of the light guide may end up traveling through the entire plate to the opposite side, causing absorption when the light hits the LEDs and PCB. Conversely, wider LGPs will have higher efficiency since nearly all the light will be extracted with little reaching the opposite side. However, in these wider LGPs the uniformity will decrease as the center of the LGP becomes less luminous.

The information on the next few pages allow the luminaire designer to choose an appropriate BrightGuide-Flex™ LGP product for the desired luminaire dimensions and choose the appropriate reflectors and/or diffusers to achieve the desired performance.

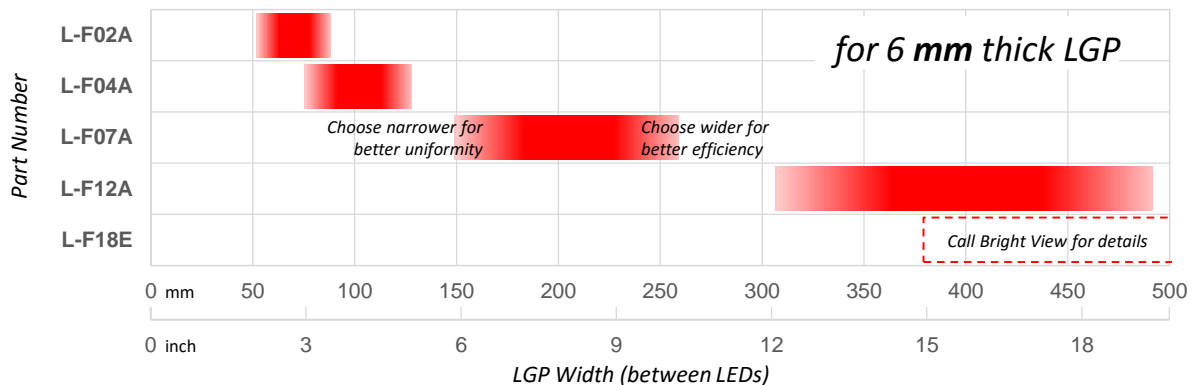
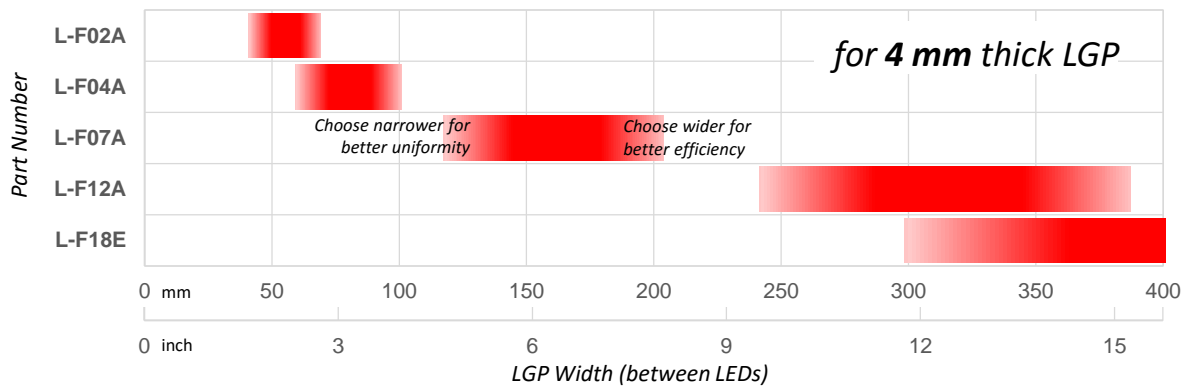
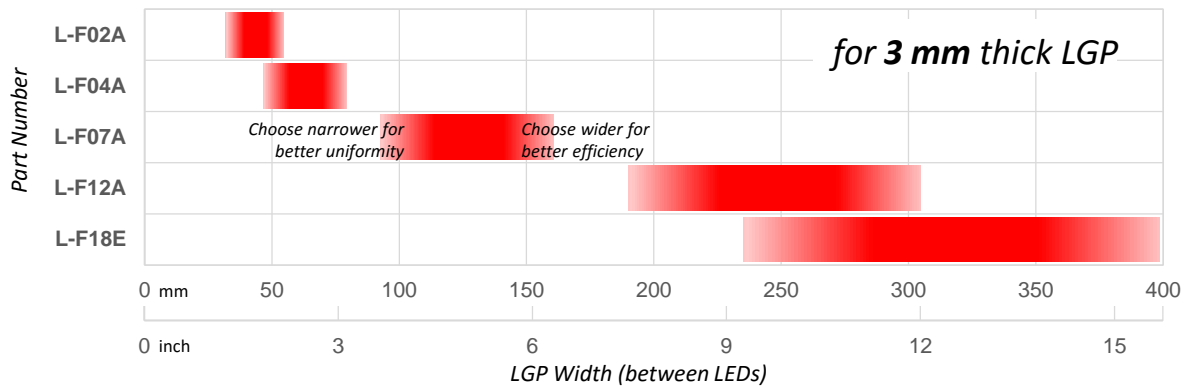
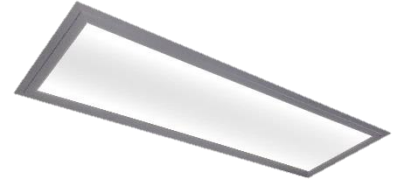


To request free samples with quick response, please contact Bright View. Applications engineers are ready to help select the right materials to give you the performance your design demands.

Linear LGP Size Selection

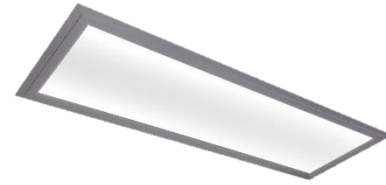
BrightGuide-Flex™ Light Guide Plates (LGP) provide an off-the-shelf flexible solution for edge-lit luminaires. To choose a BrightGuide-Flex™ LGP, follow these steps:

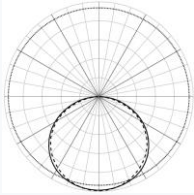
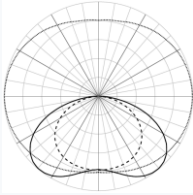
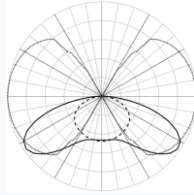
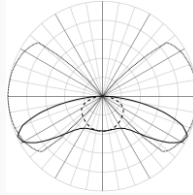
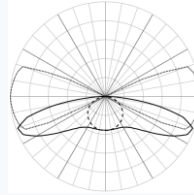
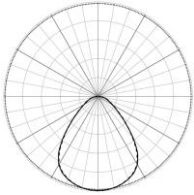
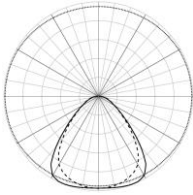
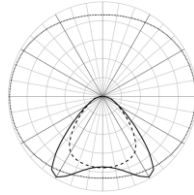
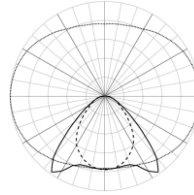
- 1 Choose one of the three plots below based on the desired Light Guide Plate (LGP) thickness of 3, 4, or 6 mm
- 2 Look up the desired width of the LGP (between LEDs) on the horizontal axis
- 3 To emphasize high efficiency, choose a part number at the upper end of the red bar; To emphasize visual uniformity, choose a part number at the lower end of the red bar
- 4 Also consider available light distribution curves on the following pages
- 5 Request a sample cut to size



Downlighting

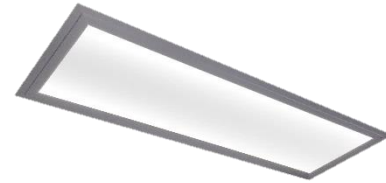
Linear (Rectangular / Square)

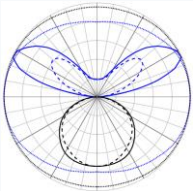
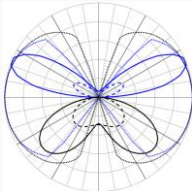
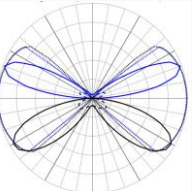
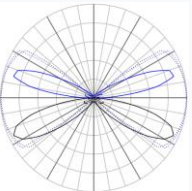
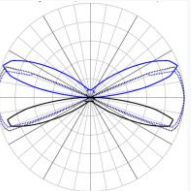
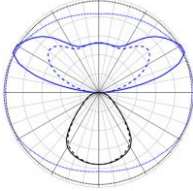
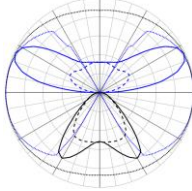
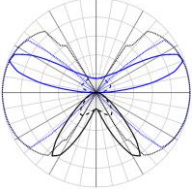
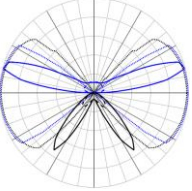
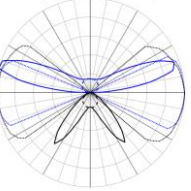


		L-F02A	L-F04A	L-F07A	L-F12A	L-F18E
		Optimal LGP width range				
LGP Thickness	3 mm	30 - 55 mm	45 - 80 mm	90 - 160 mm	190 - 305 mm	235 - 400 mm
	4 mm	40 - 70 mm	60 - 100 mm	120 - 205 mm	240 - 400 mm	300 - 505 mm
	6 mm	50 - 90 mm	75 - 130 mm	150 - 260 mm	305 - 490 mm	380 - 645 mm
LGP + BrightWhite Reflector						
		Efficiency 72 – 90% Uniformity 90 – 75% IES Spacing 1.34	Efficiency 72 – 90% Uniformity 90 – 75% IES Spacing 1.86	Efficiency 72 – 90% Uniformity 90 – 75% IES Spacing 2.50	Efficiency 72 – 90% Uniformity 90 – 75% IES Spacing 2.44	Efficiency 72 – 90% Uniformity 90 – 75% IES Spacing 1.93
LGP + BrightWhite Reflector + G-Series Diffuser					Data coming soon	
		Efficiency 70 – 88% Uniformity 94 – 77% IES Spacing 1.22 <u>Glare using 70x1220 mm:</u> UGR<19 up to 1280 lm VDT Normal up to 3850 lm VDT Intens. up to 2520 lm	Efficiency 72 – 90% Uniformity 90 – 75% IES Spacing 1.39 <u>Glare using 100x1220 mm:</u> UGR<19 up to 1750 lm VDT Normal up to 3020 lm VDT Intens. up to 2260 lm	Efficiency 72 – 90% Uniformity 90 – 75% IES Spacing 1.62 <u>Glare using 205x1220 mm:</u> UGR<19 up to 3270 lm VDT Normal up to 2760 lm VDT Intens. up to 2070 lm		Efficiency 72 – 90% Uniformity 90 – 75% IES Spacing <u>Glare using 400x1220 mm:</u> <u>Glare using 505x1220 mm:</u> UGR<19 up to 7300 lm VDT Normal up to 3620 lm VDT Intens. up to 1870 lm

All data are typical and will vary with design parameters such as shape/size, mechanical design, bezel size, choice of optics and materials, etc. Further data including sample IES files may be available upon request. Please call a Bright View applications engineer for further details.

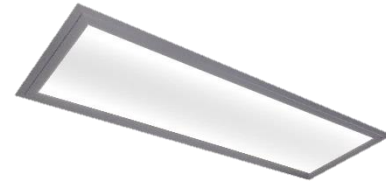
Up + down lighting
 Direct / Indirect Pendant
 Linear (Rectangular / Square)

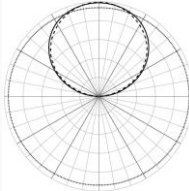
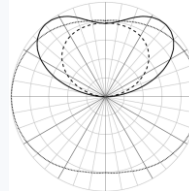
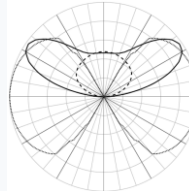
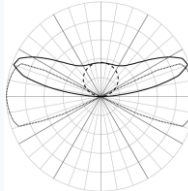


		L-F02A	L-F04A	L-F07A	L-F12A	L-F18E
		Optimal LGP width range				
LGP Thickness	3 mm	30 - 55 mm	45 - 80 mm	90 - 160 mm	190 - 305 mm	235 - 400 mm
	4 mm	40 - 70 mm	60 - 100 mm	120 - 205 mm	240 - 400 mm	300 - 505 mm
	6 mm	50 - 90 mm	75 - 130 mm	150 - 260 mm	305 - 490 mm	380 - 645 mm
LGP						
		Efficiency 86 - 94% Uniformity 85 - 70% IES Spacing (up) 3.93 IES Spacing (dn) 1.37 Up/down ratio 55/45%	Efficiency 86 - 94% Uniformity 85 - 70% IES Spacing (up) 5.96 IES Spacing (dn) 2.90 Up/down ratio 50/50%	Efficiency 86 - 94% Uniformity 85 - 70% IES Spacing (up) 7.07 IES Spacing (dn) 5.15 Up/down ratio 45/55%	Efficiency 86 - 94% Uniformity 85 - 70% IES Spacing (up) 6.56 IES Spacing (dn) 7.78 Up/down 45/55%	Efficiency 86 - 94% Uniformity 85 - 70% IES Spacing (up) 5.48 IES Spacing (dn) 6.92 Up/down ratio 50/50%
LGP + G-Series Diffuser						
		Efficiency 85 - 93% Uniformity 87 - 72% IES Spacing (up) 2.22 IES Spacing (dn) 1.27 Up/down ratio 70/30%	Efficiency 85 - 93% Uniformity 87 - 72% IES Spacing (up) 2.86 IES Spacing (dn) 1.71 Up/down ratio 60/40%	Efficiency 85 - 93% Uniformity 87 - 72% IES Spacing (up) 4.21 IES Spacing (dn) 2.36 Up/down ratio 60/40%	Efficiency 85 - 93% Uniformity 87 - 72% IES Spacing (up) 2.93 IES Spacing (dn) 1.95 Up/down ratio 60/40%	Efficiency 85 - 93% Uniformity 87 - 72% IES Spacing (up) 3.56 IES Spacing (dn) 2.28 Up/down ratio 60/40%

All data are typical and will vary with design parameters such as shape/size, mechanical design, bezel size, choice of optics and materials, etc. Further data including sample IES files may be available upon request. Please call a Bright View applications engineer for further details.

100% Uplight
Pendant
Linear (Rectangular / Square)

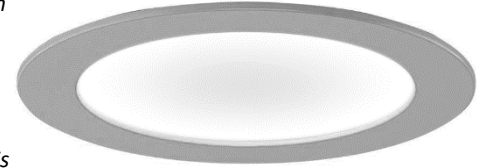


		L-F02A	L-F04A	L-F07A	L-F12A	L-F18E
		Optimal LGP width range				
LGP Thickness	3 mm	> 55 mm	> 80 mm	> 160 mm	> 305 mm	> 400 mm
	4 mm	> 70 mm	> 100 mm	> 205 mm	> 400 mm	> 505 mm
	6 mm	> 90 mm	> 130 mm	> 260 mm	> 490 mm	> 645 mm
LGP + BrightWhite Reflector					Data coming soon	
		Efficiency up to 93% IES Spacing 1.34	Efficiency up to 93% IES Spacing 1.86	Efficiency up to 93% IES Spacing 2.50	Efficiency up to 93% IES Spacing	Efficiency up to 93% IES Spacing 1.93

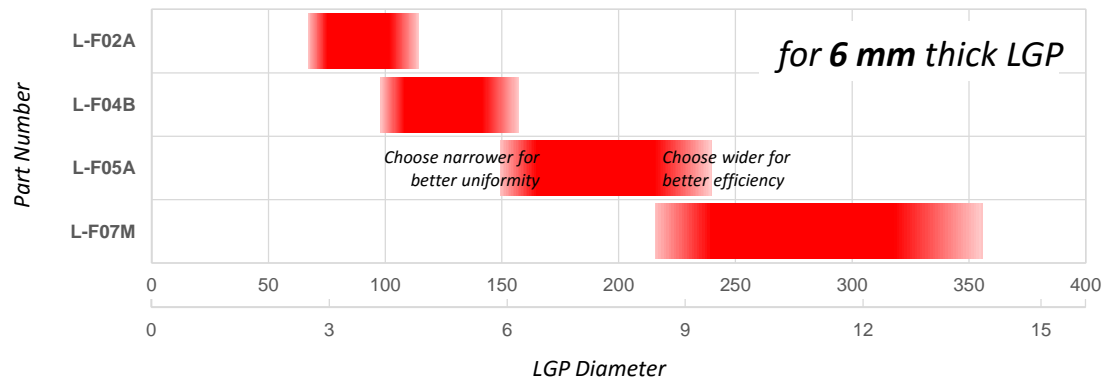
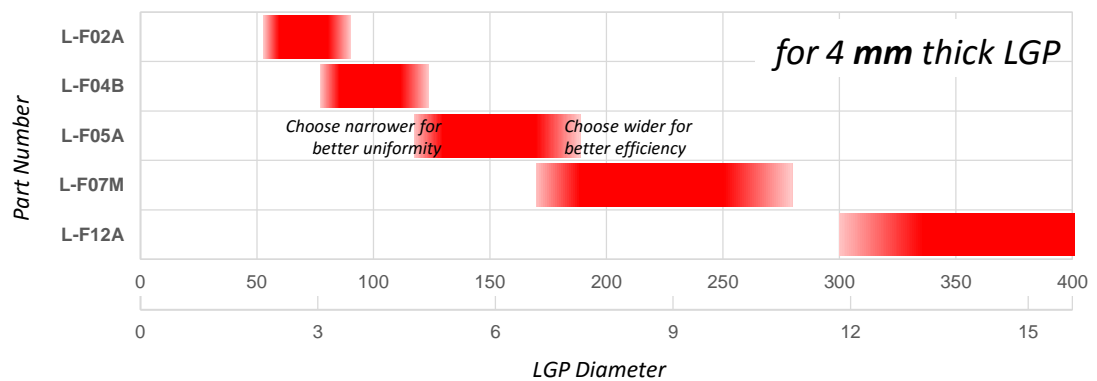
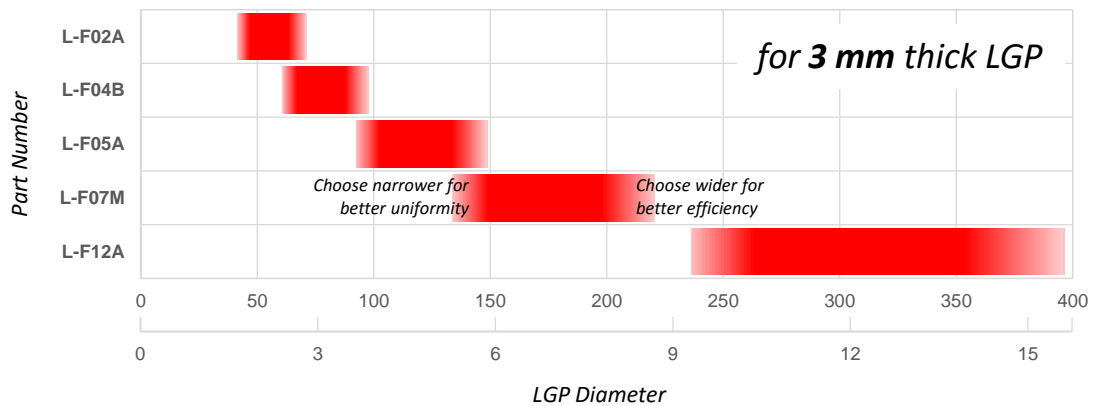
All data are typical and will vary with design parameters such as shape/size, mechanical design, bezel size, choice of optics and materials, etc. Further data including sample IES files may be available upon request. Please call a Bright View applications engineer for further details.

Circular LGP Size Selection

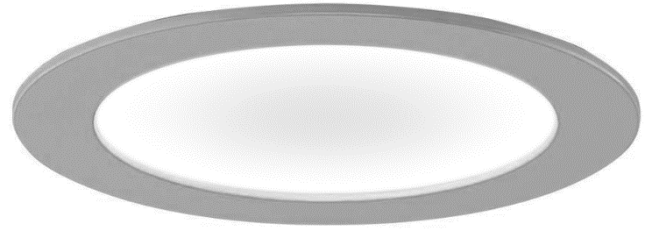
BrightGuide-Flex™ Light Guide Plates (LGP) provide an off-the-shelf flexible solution for edge-lit luminaires. To choose a BrightGuide-Flex™ LGP, follow these steps:

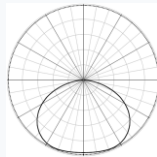
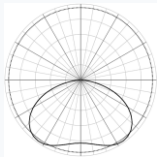
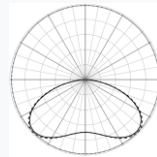
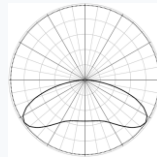
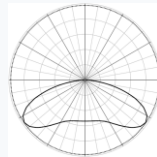
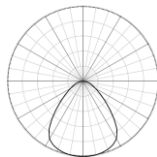
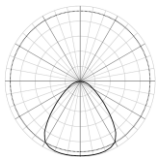
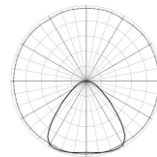
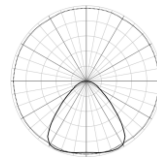
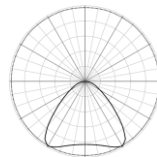


- 1 Choose one of the three plots below based on the desired Light Guide Plate (LGP) thickness of 3, 4, or 6 mm
- 2 Look up the desired diameter of the LGP (between LEDs) on the horizontal axis
- 3 To emphasize high efficiency, choose a part number at the upper end of the red bar; To emphasize visual uniformity, choose a part number at the lower end of the red bar
- 4 Also consider available light distribution curves on the following page
- 5 Request a sample cut to size



Downlighting Circular



		L-F02A	L-F04B	L-F05A	L-F07M	L-F12A	
		Optimal LGP width range					
LGP Thickness	3 mm	40 – 70 mm	55 - 95 mm	95 - 150 mm	120 - 210 mm	250 - 400 mm	
	4 mm	50 - 90 mm	75 - 120 mm	120 - 190 mm	150 - 265 mm	313 - 400 mm	
	6 mm	65 - 115 mm	95 - 160 mm	150 - 240 mm	195 - 335 mm	NA	
LGP + BrightWhite Reflector		Data coming soon	 Efficiency 80 – 93% Uniformity 90 – 75% IES Spacing	 Efficiency 80 – 93% Uniformity 90 – 75% IES Spacing 1.49	 Efficiency 80 – 93% Uniformity 90 – 75% IES Spacing 1.99	 Efficiency 80 – 93% Uniformity 90 – 75% IES Spacing 2.26	 Efficiency 80 – 93% Uniformity 90 – 75% IES Spacing 1.83
LGP + BrightWhite Reflector + G-Series Diffuser		Data coming soon	 Efficiency 76 – 90% Uniformity 90 – 75% IES Spacing <u>Glare using 90 mm dia:</u>	 Efficiency 76 – 90% Uniformity 90 – 75% IES Spacing 1.27 <u>Glare using 120 mm dia:</u> UGR<19 up to 560 lm VDT Normal up to 3040 lm VDT Intens. up to 2280 lm	 Efficiency 76 – 90% Uniformity 90 – 75% IES Spacing 1.43 <u>Glare using 190 mm dia:</u> UGR<19 up to 1640 lm VDT Normal up to 3460 lm VDT Intens. up to 2230 lm	 Efficiency 76 – 90% Uniformity 90 – 75% IES Spacing 1.56 <u>Glare using 265 mm dia:</u> UGR<19 up to 3050 lm VDT Normal up to 3940 lm VDT Intens. up to 2230 lm	 Efficiency 76 – 90% Uniformity 90 – 75% IES Spacing <u>Glare using 400 mm dia:</u> UGR<19 up to 6550 lm VDT Normal up to 3810 lm VDT Intens. up to 2120 lm

All data are typical and will vary with design parameters such as shape/size, mechanical design, bezel size, choice of optics and materials, etc. Further data including sample IES files may be available upon request. Please call a Bright View applications engineer for further details.