

Sending Light
 Where It is Needed



Our Catalog

Standard products currently available for sale:

- [Circular diffusers](#)
- [Square diffusers](#)
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- [Line diffusers](#)
- [Ring diffusers](#)
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For custom specifications please contact us at Info@rpc Photonics.com

NOTES

- Nominal angles are full-width at 90% level for an index of 1.56, unless otherwise specified.
- Input illumination assumed collimated.
- "Feature size" lists the typical lateral feature sizes in the diffuser. For best uniformity the illuminating beam should be several times larger than the feature size.
- "ARO" means "After Receipt of Order".
- VISA and MasterCard accepted.

Circular Angle	Model	Feature size	Sizes (in)	Availability
0.25°	EDC-0.25	~1.5mm	≤ 2x2	Immediate
0.5°	EDC-0.5	~500µm	≤ 2x2	Immediate
1°	EDC-1	~400µm	≤ 2x2	Immediate
2°	EDC-2	~300µm	≤ 2x2	Immediate
5°	EDC-5	~250µm	≤ 2x2	Immediate
10°	EDC-10	~200µm	≤ 2x2	Immediate
15°	EDC-15	~180µm	≤ 2x2	Immediate
20°	EDC-20	~160µm	≤ 2x2	Immediate
30°	EDC-30	~140µm	≤ 7x7	Immediate
40°	EDC-40	~140µm	≤ 2x2	Immediate
50°	EDC-50	~80µm	≤ 2x2	Immediate
60°	EDC-60	~80µm	≤ 2x2	Immediate
80°	EDC-80	~50µm	≤ 2x2	Immediate
100°	EDC-100	~50µm	≤ 2x2	Immediate
120°	EDC-120	~40µm	≤ 2x2	Immediate

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Square Angle	Model	Feature size	Sizes (in)	Availability
0.25°	EDS-0.25	~1.5mm	≤ 2x2	1 week ARO
0.5°	EDS-0.5	~500µm	≤ 2x2	1 week ARO
1°	EDS-1	~400µm	≤ 2x2	1 week ARO
2°	EDS-2	~300µm	≤ 2x2	1 week ARO
5°	EDS-5	~250µm	≤ 2x2	1 week ARO
6°	EDS-6	~250µm	≤ 2x2	1 week ARO
10°	EDS-10	~180µm	≤ 2x2	Immediate
20°	EDS-20	~120µm	≤ 2x2	Immediate
40°	EDS-40	~60µm	≤ 2x2	1 week ARO
50°	EDS-50	~40µm	< 2x2	1 week ARO

30°	EDS-30	~70µm	≤ 2x2	1 week ARO
60°	EDS-60	~40µm	≤ 2x2	Immediate

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Rectangular

Angle	Model	Feature size	Sizes (in)	Availability
2°× 1°	EDR-2x1	~400µm	≤ 2x2	Immediate
5°× 1°	EDR-5x1	~300µm	≤ 2x2	Immediate
6°× 3°	EDR-6x3	~250µm	≤ 2x2	1 week ARO
10°× 1°	EDR-10x1	~200µm	≤ 2x2	1 week ARO
10°× 2°	EDR-10x2	~200µm	≤ 2x2	1 week ARO
10°× 5°	EDR-10x5	~200µm	≤ 2x2	1 week ARO
20°× 2°	EDR-20x2	~160µm	≤ 2x2	Immediate
20°× 5°	EDR-20x5	~120µm	≤ 2x2	Immediate
20°× 10°	EDR-20x10	~120µm	≤ 2x2	Immediate
24°× 12°	EDR-24x12	~80µm	≤ 2x2	Immediate
40°× 5°	EDR-40x5	~80µm	≤ 2x2	1 week ARO
40°× 10°	EDR-40x10	~60µm	≤ 2x2	1 week ARO
40°× 20°	EDR-40x20	~50µm	≤ 2x2	Immediate

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Elliptical

Angle	Model	Feature size	Sizes (in)	Availability
10°× 1°	EDE-10x1	~240µm	≤ 2x2	1 week ARO
10°× 5°	EDE-10x5	~200µm	≤ 2x2	1 week ARO
20°× 1°	EDE-20x1	~160µm	≤ 2x2	1 week ARO
20°× 5°	EDE-20x5	~120µm	≤ 2x2	1 week ARO
20°× 10°	EDE-20x10	~100µm	≤ 2x2	1 week ARO
40°× 5°	EDE-40x5	~80µm	≤ 2x2	1 week ARO
40°× 20°	EDE-40x20	~60µm	≤ 2x2	1 week ARO
60°× 1°	EDE-60x1	~60µm	≤ 2x2	Immediate
60°× 10°	EDE-60x10	~50µm	≤ 2x2	1 week ARO

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Line

Angle	Model	Feature size	Sizes (in)	Availability
5°× 0°	EDL-5x0	~240µm	≤ 2x2	Immediate
10°× 0°	EDL-10x0	~180µm	≤ 2x2	Immediate
20°× 0°	EDL-20x0	~120µm	≤ 2x2	1 week ARO
40°× 0°	EDL-40x0	~80µm	≤ 2x2	1 week ARO
60°× 0°	EDL-60x0	~80µm	≤ 2x2	1 week ARO
80°× 0°	EDL-80x0	~600µm	≤ 2x2	1 week ARO
100°× 0°	EDL-100x0	~40µm	≤ 2x2	1 week ARO
10°× 0.4°	EDL-10x0.4	~180µm	≤ 2x2	1 week ARO
20°× 0.4°	EDL-20x0.4	~120µm	≤ 2x2	1 week ARO
40°× 0.4°	EDL-40x0.4	~80µm	≤ 2x2	1 week ARO

*Along nonzero narrow direction intensity profile is Gaussian

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Ring

Angle	Model	Intensity Ratio (Edge-to-Center)	Sizes (in)	Availability
10°	EDRG-10-4	4	≤ 2x2	2 weeks ARO
10°	EDRG-10-10	10	≤ 2x2	2 weeks ARO
20°	EDRG-20-4	4	≤ 2x2	Immediate
20°	EDRG-20-10	10	≤ 2x2	2 weeks ARO
40°	EDRG-40-4	4	≤ 2x2	2 weeks ARO
40°	EDRG-40-10	10	≤ 2x2	2 weeks ARO

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Gaussian

Angle	Model	Feature size	Sizes (in)	Availability
1°	EDG-1	~100µm	≤ 2x2	Immediate
5°	EDG-5	~80µm	≤ 2x2	Immediate
10°	EDG-10	~40µm	≤ 2x2	Immediate

20°	EDG-20	~30µm	≤ 2x2	1 week ARO
40°	EDG-40	~30µm	≤ 2x2	1 week ARO
60°	EDG-60	~30µm	≤ 2x2	1 week ARO
80°	EDG-80	~30µm	≤ 2x2	1 week ARO
100°	EDG-100	~30µm	≤ 2x2	Immediate
120°	EDG-120	~30µm	≤ 2x2	Immediate

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Vortex

Model	Charge	Availability
VPP-1	1	2-3 wks ARO
VPP-2	2	2-3 wks ARO

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Specialty patterns

Pattern	Model	Feature size	Sizes (in)	Availability
Lambertian	HiLAM	~50µm	≤ 2x2	Immediate
Cross-hair	ED-CH-5	~120µm	≤ 2x2	2 weeks ARO

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Microlens arrays

- Units are mm's
- Effective focal length (EFL) for index of refraction n = 1.5
- "Size" is the minimum substrate size in mm

Part #	Array	Lens Diameter	Radius of curvature	Pitch	EFL	Size
MLA18x22-1	18x22	1.670	2.835	2.2	5.67	76.2
MLA18x22-2	18x22	1.670	2.835	2.2	5.67	76.2
MLA18x22-3	18x22	1.68	2.83821	2.2	5.67	76.2
MLA18x22-4	18x22	1.6	2.83845	2.2	5.67	76.2
MLA38x38-1	38x38	1.34	2.8318	1.38	2.68	76.2
MLA38x38-2	38x38	1.5	2.06	2.2	4.12	100
MLA38x38-3	38x38	1.15	2.04755	2.2	4.09	100
MLA10x10-1	10x10	1.413	2.047	2.2	2.8	76.2
MLA3-1x8-1	1x8	0.26	0.235	0.25	0.47	76.2
MLA-7056-1	Fully Populated	0.90	1.151	1	2.3	100
MLA39x39-1	39x39	1.10	1.887	1.25	3.77	100
MLA16-12x12-1	12x12	0.94	1.524	1.25	3.05	100
MLA16-5x5-1	5x5	1.30	2.384	1.75	4.77	100
MLA5-27-1	27lenses	2.22	3.254	2.766	5.51	100
MLA2-45-45-1	45x45	1.006	1.89	0.9999	3.78	100
MLA5-27-1	27lenses	2.1	3.1227	2.9924	6.24	100

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