

Ring light (RN)

LS-RN series · Ring lights · 86 models



Ring light with a high-density LED array in a compact, easy-to-install design. Various illumination angles are offered (0°, 15°, 30°, 45°, 60°, 90° and special angles) and angles can be customized; a diffuser plate is optional.

Features

- Various angles optional, angle can be customized
- Easy to install, compact design
- High-density LED array, high luminance
- Diffuser plate optional, adapts to different applications
- Wire jacket covers the cable exit against pulling
- Options: flat diffuser plate (reduces lamp shadow and glare on reflective workpieces), cup diffuser plate (matches the light angle for a more uniform, steady emitting area), polarized plate (used with a polarized lens to remove glare from uneven surfaces), lens shackle (fastens the light to the lens thread where space is small)
- Customizable: outer & inner diameter, colour & colour temperature, cable length, installation method, emitting angle, shape, combined, multi-area control

Applications

- IC chip appearance and character inspection
- PCB inspection
- Tag inspection
- Microscope illumination
- Screw shape inspection (low angle / high angle)

Colours

R	620-630 nm
G	525-530 nm
B	465-470 nm
W	6600 K

Common specifications

Voltage	24 V DC
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Peak wavelength / colour temperature	Red 620-630 nm, Green 525-530 nm, Blue 465-470 nm, White 6600 K (colour temperature)
Adapted controller	Strobe controller; analog controller; digital controller
Options	Diffuser plate, polarized plate, lens shackle
Angle definition	Angle between light ray and horizontal plane (catalog: 'water level')
Range by angle (overview)	0°: dia. 50-300, WD 5-20 mm, FOV 1-200 mm; 30°: dia. 50-350, WD 10-100 mm, FOV 1-200 mm; 45°: dia. 50-200, WD 20-150 mm, FOV 1-250 mm; 60°: dia. 28-250, WD 30-300 mm, FOV 1-250 mm; 90°: dia. 28-200, WD 50-500 mm, FOV 1-300 mm; special angle (LS-RN series): dia. 32-180, WD 5-500 mm, FOV 1-300 mm
Colour temperature of white	6600 K
Operating environment	Temperature 0-50 °C, humidity 20-85% (non-condensing)
Life-span	50000 h (to 50% of factory-default luminance)
Extension cable options	PVC extension cable (flexible, bend and heat resistant, for use inside equipment); high-flexibility extension cable (harder and more abrasion resistant than PVC, for drag-chain production lines)
UV / IR	UV & IR light can be customized as required

Ordering code: LS-RN<outer diameter><angle>-<R/G/B/W/IR/UV>

Models

Model	Angle (between light ray and horizontal plane)	Power R (W)	Power G/B/W (W)	Weight (g)	Outer diameter (mm)	Inner diameter (mm)	Height (mm)
LS-RN5000 colours: R, G, B, W	0°	0.7	1.4	47	50	20	9
LS-RN6000 colours: R, G, B, W	0°	1.1	1.8	56	60	30	11
LS-RN7400 colours: R, G, B, W	0°	1.5	2.1	67	74	38	9
LS-RN9600 colours: R, G, B, W	0°	1.8	2.9	85	96	60	9
LS-RN12000 colours: R, G, B, W	0°	2.1	3.6	112	120	86	12
LS-RN14600 colours: R, G, B, W	0°	2.9	4.7	223	146	104	12
LS-RN15000 colours: R, G, B, W	0°	2.9	4.3	225	150	106	9
LS-RN17200 colours: R, G, B, W	0°	3.6	6.2	232	172	130	12
LS-RN20000 colours: R, G, B, W	0°	3.5	5.8	319	200	158	12

LS-RN22000 colours: R, G, B, W	0°	4.4	6.5	327	220	182	12
LS-RN30000 colours: R, G, B, W	0°	6.5	10.8	360	300	258	13
LS-RN5030 colours: R, G, B, W	30°	1.9	2.9	68	50	25	25
LS-RN6030 colours: R, G, B, W	30°	2.2	3.4	91	60	35	25
LS-RN7030 colours: R, G, B, W	30°	2.2	3.8	101	70	33	20
LS-RN7430 colours: R, G, B, W	30°	1.9	2.9	106	74	40	20
LS-RN9030 colours: R, G, B, W	30°	3.8	5.8	164	90	51	23
LS-RN10030 colours: R, G, B, W	30°	4.3	7.2	201	100	66	27
LS-RN12030 colours: R, G, B, W	30°	4.3	7.2	222	120	80	23
LS-RN12230 colours: R, G, B, W	30°	4.3	7.2	229	122	80	24
LS-RN15030 colours: R, G, B, W	30°	10.1	15.1	389	150	112	28
LS-RN18030 colours: R, G, B, W	30°	9.1	14.9	437	180	132	29
LS-RN18430 colours: R, G, B, W	30°	9.4	15.6	452	184	142	30
LS-RN20030 colours: R, G, B, W	30°	13.4	20.2	510	200	164	28
LS-RN21030 colours: R, G, B, W	30°	13.0	21.6	647	210	174	28
LS-RN24030 colours: R, G, B, W	30°	16.3	24.5	665	240	198	28
LS-RN25030 colours: R, G, B, W	30°	16.3	27.1	693	250	201	30

LS-RN30030 colours: R, G, B, W	30°	22.1	33.1	875	300	251	30
LS-RN35030 colours: R, G, B, W	30°	22.1	36.5	969	350	300	26
LS-RN5045 colours: R, G, B, W	45°	1.9	2.9	76	50	20	22
LS-RN7045 colours: R, G, B, W	45°	2.4	3.8	112	70	38	21
LS-RN9045 colours: R, G, B, W	45°	3.4	5.0	141	90	56	20.5
LS-RN10045 colours: R, G, B, W	45°	5.3	7.9	162	100	60	22
LS-RN12045 colours: R, G, B, W	45°	7.9	13.2	371	120	68	30
LS-RN15045 colours: R, G, B, W	45°	10.1	15.1	356	150	106	25.7
LS-RN20045 colours: R, G, B, W	45°	10.1	16.8	456	200	155	27.5
LS-RN2860 colours: R, G, B, W	60°	0.2	0.5	28	28	10	15
LS-RN5060 colours: R, G, B, W	60°	1.0	1.7	57	50	28.5	19.5
LS-RN6060 colours: R, G, B, W	60°	1.7	2.4	80	60	33.5	19.5
LS-RN6660 colours: R, G, B, W	60°	2.2	3.6	100	66	35	18
LS-RN6760 colours: R, G, B, W	60°	2.2	3.6	109	67	36	21
LS-RN7060 colours: R, G, B, W	60°	2.2	3.4	116	70	30	20
LS-RN7460 colours: R, G, B, W	60°	2.6	3.8	110	74	35	20
LS-RN9060 colours: R, G, B, W	60°	2.9	4.3	149	90	40	20
LS-RN10060 colours: R, G, B, W	60°	4.3	7.2	217	100	50	22

LS-RN12060 colours: R, G, B, W	60°	8.6	13.0	335	120	60	25
LS-RN15060 colours: R, G, B, W	60°	8.6	14.4	409	150	94	24.5
LS-RN18060 colours: R, G, B, W	60°	8.6	14.4	417	180	126	23
LS-RN20060 colours: R, G, B, W	60°	9.6	16.1	483	200	156	20
LS-RN20860 colours: R, G, B, W	60°	10.1	16.8	509	208	155	24
LS-RN21060 colours: R, G, B, W	60°	11.5	17.3	515	210	162	22
LS-RN25060 colours: R, G, B, W	60°	17.3	25.9	647	250	181	27
LS-RN26060 colours: R, G, B, W	60°	18.8	28.5	688	260	190	28
LS-RN3590 colours: R, G, B, W	90°	0.7	1.0	43	35	14	18
LS-RN4090 colours: R, G, B, W	90°	0.7	1.0	50	40	18	22
LS-RN5090 colours: R, G, B, W	90°	1.0	1.4	61	50	25	21
LS-RN5590 colours: R, G, B, W	90°	1.4	2.4	78	55	24	20
LS-RN7090 colours: R, G, B, W	90°	2.2	3.6	109	70	36	20.5
LS-RN9090 colours: R, G, B, W	90°	3.6	6.0	189	90	40	20
LS-RN10090 colours: R, G, B, W	90°	5.8	8.6	235	100	40	20
LS-RN11090 colours: R, G, B, W	90°	3.6	6.0	281	110	70	20
LS-RN12090 colours: R, G, B, W	90°	7.2	12.0	331	120	50	18
LS-RN13590 colours: R, G, B, W	90°	6.7	10.1	310	135	87	20

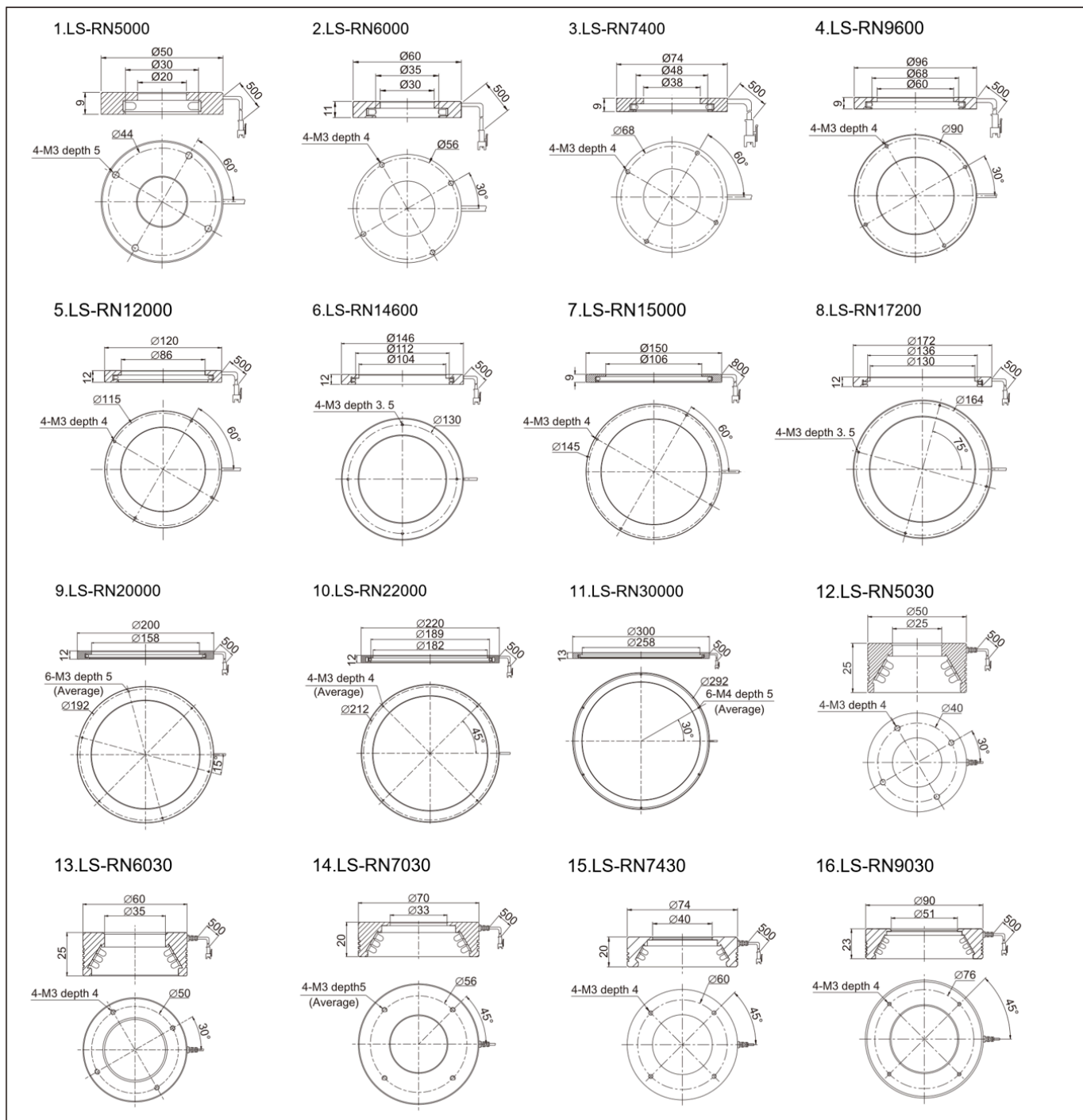
LS-RN15090 colours: R, G, B, W	90°	10.6	20.4	585	150	25	22.5
LS-RN16590 colours: R, G, B, W	90°	16.3	24.5	667	165	55	22.5
LS-RN20090 colours: R, G, B, W	90°	19.4	32.4	956	200	70	22.5
LS-RN12015 colours: R, G, B, W	15°	4.3	7.2	180	120	86	28
LS-RN14615 colours: R, G, B, W	15°	3.8	6.2	245	146	128	25
LS-RN17315 colours: R, G, B, W	15°	4.6	7.4	312	173	155	25
LS-RN18015 colours: R, G, B, W	15°	7.2	12.2	380	180	162	25
LS-RN3275 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	0.7	1.2	34	32	10	16
LS-RN3875 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	0.7	1.2	41	38	15	16
LS-RN4265 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	1.0	1.4	47	42	18	18
LS-RN4550 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	0.5	0.7	51	45	25	12
LS-RN5075 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	1.0	1.7	49	50	28	16
LS-RN5570 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	1.4	2.4	74	55	21	18
LS-RN6975 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	2.2	3.6	96	69	33	18
LS-RN7475 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	2.9	4.3	110	74	35	16
LS-RN7485 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	2.4	3.6	119	74	30	20
LS-RN8080 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	2.9	4.3	134	80	32	19
LS-RN9070 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	4.1	6.7	161	90	44	22
LS-RN9610 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	2.4	3.8	145	96	72	21

LS-RN10375 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	4.3	7.2	272	103	48	24
LS-RN12050 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	5.8	9.6	227	120	80	23
LS-RN12080 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	6.2	9.4	280	120	65	20
LS-RN16517 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	4.8	7.2	310	165	132	19
LS-RN18075 colours: R, G, B, W	Special angle (10°/50°/65°/70°/75°/80°/85° group)	8.6	14.4	345	180	130	18

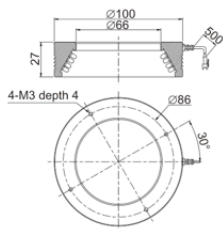
More values per model (Voltage (V), Mounting holes, Drawing no., Common model, Cable (mm), Diffuser (drawn), Emitting surface dia. (mm)) are on each product page.

Dimensions

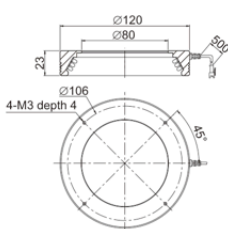




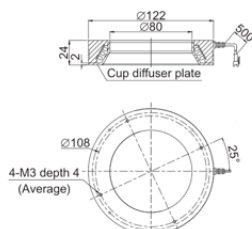
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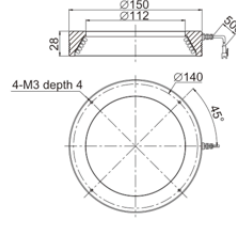
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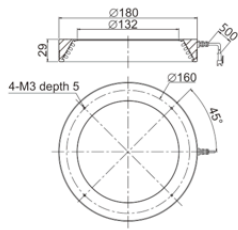
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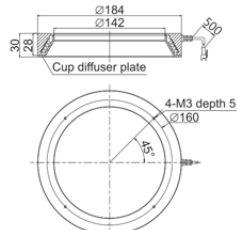
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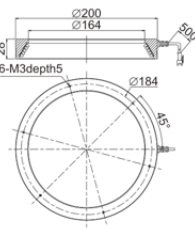
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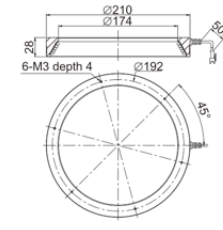
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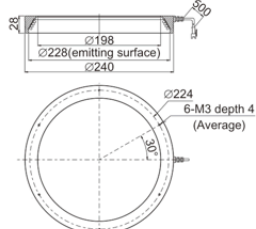
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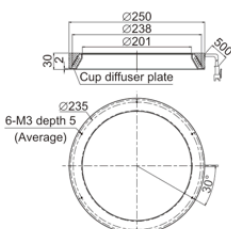
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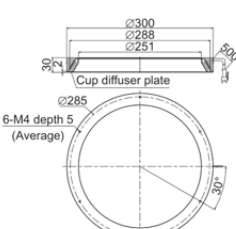
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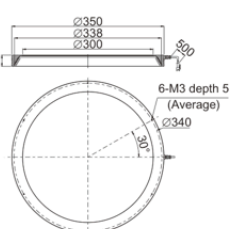
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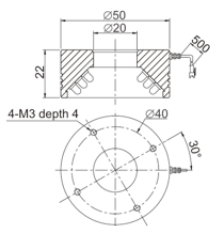
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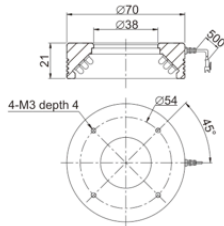
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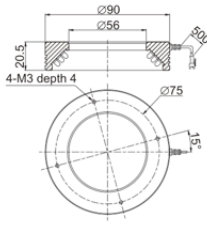
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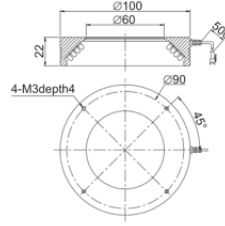
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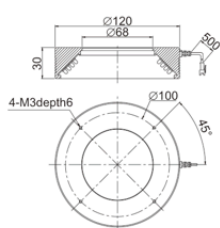
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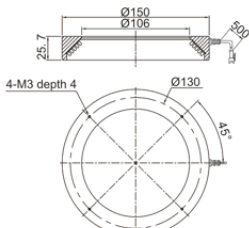
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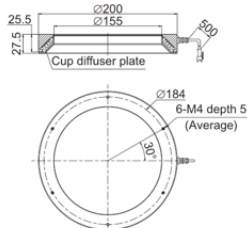
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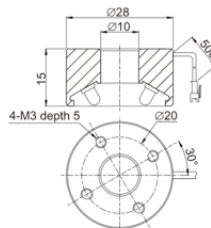
34.LS-RN15045



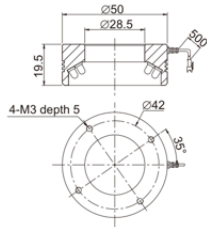
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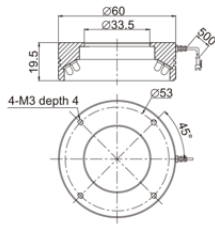
36.LS-RN2860



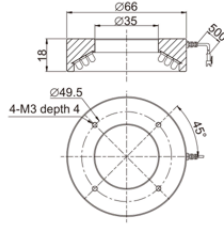
37.LS-RN5060



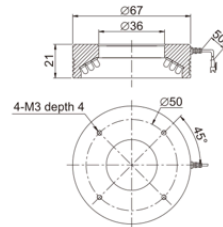
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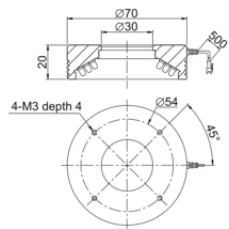
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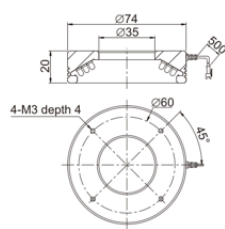
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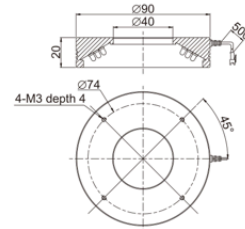
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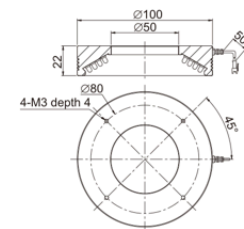
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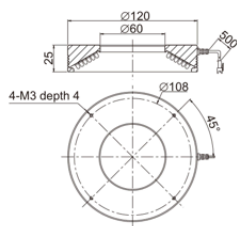
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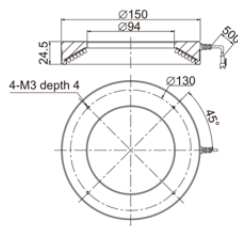
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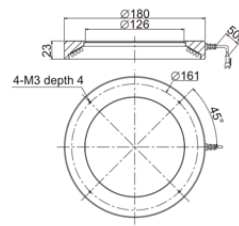
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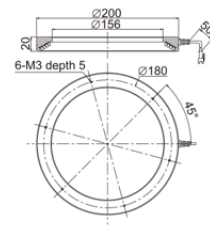
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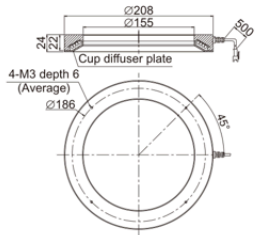
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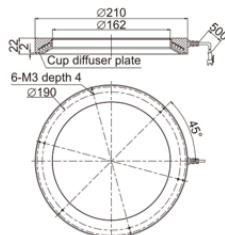
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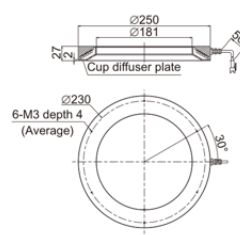
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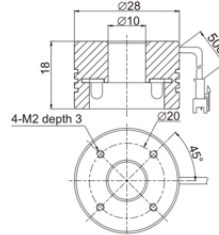
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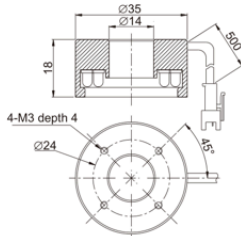
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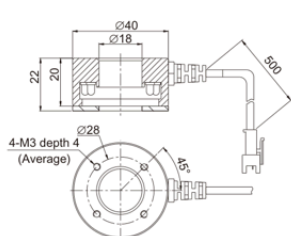
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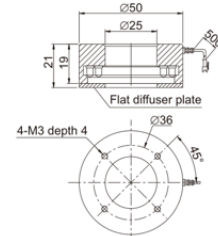
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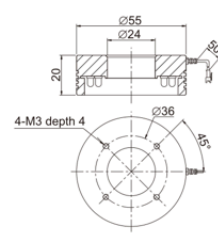
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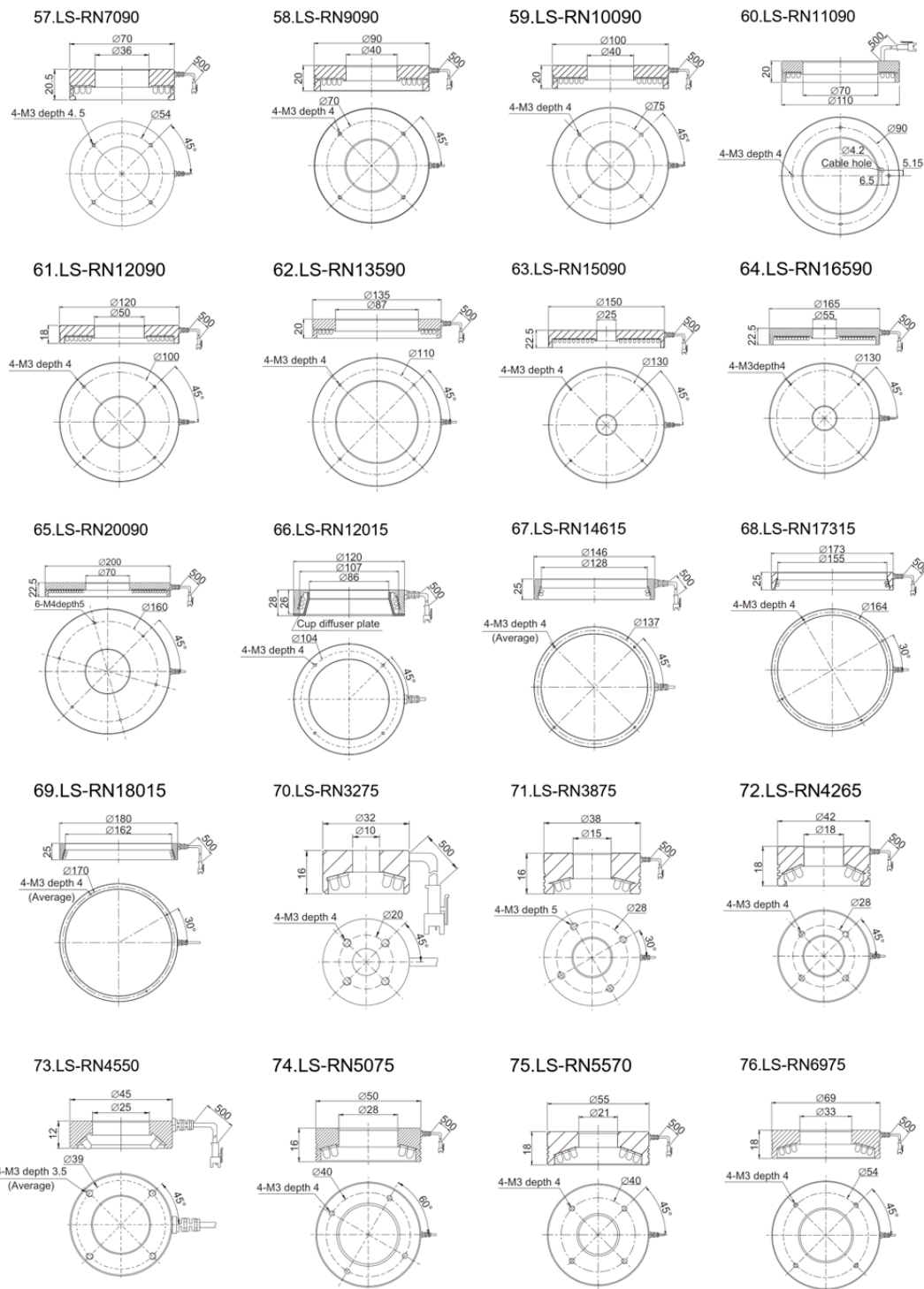


55.LS-RN5090



56.LS-RN5590

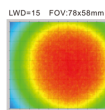
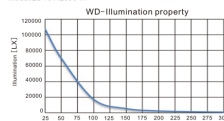




Performance

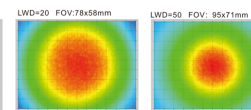
Illumination property diagram

Model LS-RN12030-V

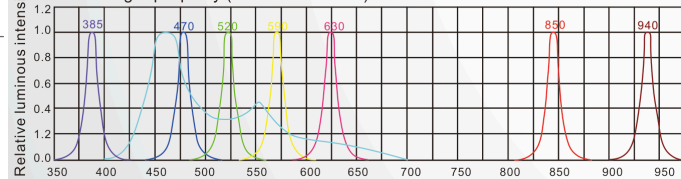


*Above diagram only for reference.

Uniformity (Relative irradiance)



wavelength property (reference value)



Product views

