Full-Color LED Zoom Profile Spotlight

Standard Version

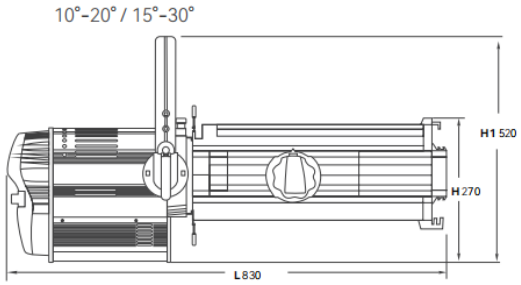
DD–P1020（10°-20°）
DD–P1530（15°-30°）
DD–P2550（25°-50°）

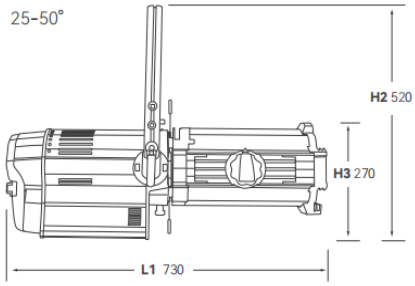


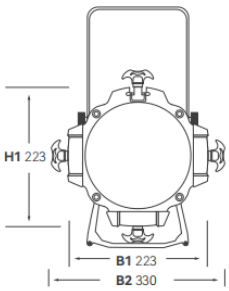




10° -20° /15° -30°　　25° -50°







Fanless Version

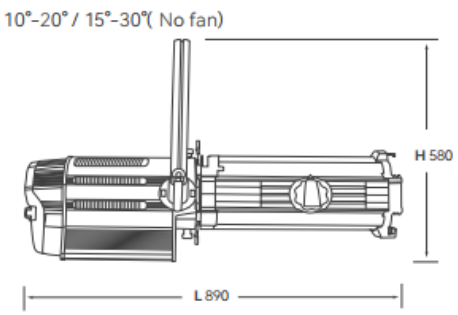
DD–P1020N（10°-20°）
DD–P1530N（15°-30°）
DD–P2550N（25°-50°）

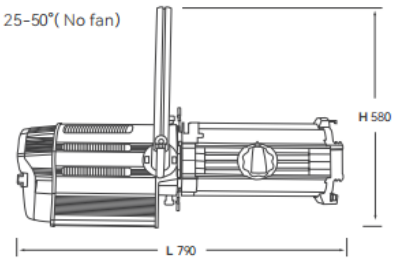


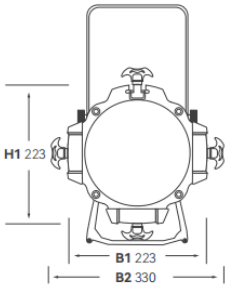




10° -20° /15° -30°　　25° -50°







Full-Color LED Zoom Profile Spotlight

Features & Specifications

Light source

1. LED source: 24 × multicolor 5050 LED packages, each with a nominal package rating of up to 24 W. Actual fixture power is electronically limited by the multi-channel drive system.
2. LED lifetime: 50,000–100,000 hours.

Power & Electrical

1. Input voltage: AC 100–240 V, 50/60 Hz
2. Maximum power consumption: 220W at 2700–10,000K white output; Red only: 55W; Green only: 110W; Blue only: 110W

Control & Operation

1. Display: OLED display with Chinese and English menu interfaces; display size: 30 × 15 mm.
2. Control: DMX512 control and local control via buttons and rotary encoder for dimming, CCT and DUV adjustment.
3. Control protocol: DMX512 with RDM support.
4. DMX modes: 4-channel, 12-channel and 13-channel modes.
5. Dimming: 16-bit or higher smooth and linear flicker-free dimming with no perceptible delay; PWM frequency ≥28 kHz.
6. Dimming modes: 7 selectable dimming modes.
7. Zoom: Manual adjustment. Focus: Manual focus adjustment
8. Cooling & Noise: Available in standard fan-cooled and fanless versions. The fan-cooled version features intelligent variable-speed cooling. Fan speed is automatically adjusted according to fixture temperature and output level. Under low-output conditions, the fan may stop automatically. Maximum noise level: ≤29 dBA at 1 m. The fanless version operates silently with no fan noise.
9. Operating ambient temperature: −25 °C to +40 °C
10. IP rating: IP20

Color Performance & Optical Specifications

1. CCT: Continuously adjustable from 2700 K to 10,000 K with smooth, linear adjustment via DMX or local rotary control. The corresponding CCT value is shown on the display. Adjustment is available in 100 K increments. CCT accuracy: Brightness deviation during CCT adjustment is ≤12%; Average CCT deviation between narrow and wide beam angles is ≤3%. Beam CCT uniformity: Average CCT deviation between the beam center and surrounding area, Average CCT deviation between the beam center and the outermost edge of the projected beam: ≤3%. CCT remains adjustable at output levels down to 0.5%.
2. CRI (Ra): average ≥95
3. TLCI: average ≥95
4. TM30(Rf): average ≥92, TM30(Rg): average ≥103
5. DUV(GM) adjustment: Positive and negative DUV adjustment from approximately +0.018 to −0.020. During DUV adjustment, average CCT deviation is ≤6%, CRI deviation ≤4%, and TLCI deviation ≤7%.
6. Color control: 360° hue adjustment with independent saturation control. Includes 72 built-in preset colors and supports individual color-channel adjustment for custom color mixing. Multiple fixtures provide visually consistent color output with no obvious color difference.
7. Luminous flux:2700 K: 6300 lm,3200 K: 6400 lm,5600 K: 6700 lm,10,000 K: 6100 lm, Red: 460 lm, Green: 3100 lm, Blue: 700 lm.
8. Zoom ranges: 10°–20°, 15°–30°, 25°–50°
9. Optical system: The light passes through a multi-element optical system incorporating seven optical elements, producing a clean and highly uniform projected beam with minimal yellow or blue edging, no visible dark patterns, minimal chromatic dispersion, excellent color mixing and no ghosting or double-image effect.

Construction & Standard Accessories

1. Housing material: Aluminum alloy
2. Surface finish: Anodized or powder-coated finish; custom colors are available according to customer requirements.
3. Standard accessories: Optical diffusion plate, power input/output connectors and signal input/output connectors. Additional accessories are available upon request and can be customized to meet specific customer requirements.
4. Iris & gobo holder: Optional iris and gobo holder available upon request.

Fan-Cooled vs. Fanless Versions: The fan-cooled and fanless versions share the same optical, color and control specifications. The fanless version is approximately 6 cm longer and 1.1 kg heavier. Pricing varies by version.

Dimensions & Weight

Model / Zoom Range	Inner size /cm （cm）	Packing size/cm	NW/kg	GW/kg
10°–20°(Fan-Cooled)	87X29X29	94X31.5X33	14.5	16.5
15°–30°(Fan-Cooled)	87X29X29	94X31.5X33	14.8	16.8
25°–50°(Fan-Cooled)	77X29X29	85X31.5X33	14.2	16
10°–20°(Fanless)	93X29X29	99X31.5X33	15.6	17.6
15°–30°(Fanless)	93X29X29	99X31.5X33	15.9	17.9
25°–50°(Fanless)	83X29X29	94X31.5X33	15.3	17.1

Beam Diameter & Illuminance at Various Throw Distances

10°–20° Full-Color LED Zoom Profile Spotlight

Throw Distance (m)		3	6	8	10	12	14	16	18	20	22	24	26	28	30
10° Beam Diameter (m)		0.53	1.05	1.4	1.75	2.1	2.45	2.8	3.15	3.5	3.85	4.2	4.55	4.9	5.25
20° Beam Diameter (m)		1.03	2.12	2.83	3.53	4.23	4.94	5.64	6.35	7.05	7.76	8.46	9.7	9.87	10.5
2700K	10° Center (lx)	12910	3227	1815	1162	807	593	454	359	290	240	202	172	148	129
	20° Center (lx)	3923	996	560	358	249	183	140	111	90	74	62	53	45	40
3200K	10° Center (lx)	13359	3340	1879	1202	835	613	470	371	301	248	208	178	153	134
	20° Center (lx)	4264	1066	600	384	267	196	150	118	96	79	67	57	49	43
5600K	10° Center (lx)	13789	3447	1939	1241	862	633	485	383	310	256	215	184	158	138
	20° Center (lx)	4352	1088	612	392	272	200	153	121	98	81	68	58	50	44
Single red	10° Center (lx)	1162	290	163	105	73	53	41	32	26	22	18	15	13	12
	20° Center (lx)	385	96	54	35	24	18	14	11	9	7	6	5	4	3
Single green	10° Center (lx)	6703	1676	943	603	419	308	236	186	151	125	105	89	77	67
	20° Center (lx)	2175	544	306	196	136	100	76	60	49	40	34	29	25	22
Single blue	10° Center (lx)	1381	345	194	124	86	63	49	38	31	26	22	18	16	14
	20° Center (lx)	506	127	71	46	32	23	18	14	11	9	8	7	6	5

15°–30° Full-Color LED Zoom Profile Spotlight

Throw Distance (m)		3	4	5	6	7	8	9	10	12.5	15	17.5	20
15° Beam Diameter (m)		0.79	1.05	1.32	1.58	1.84	2.11	2.37	2.63	3.16	3.95	4.61	5.27
30° Beam Diameter (m)		1.61	2.14	2.68	3.22	3.75	4.29	4.82	5.36	6.7	8.04	9.38	10.72
2700K	15° Center (lx)	8162	4591	2938	2040	1499	1148	907	735	470	327	239	184
	30° Center (lx)	2519	1418	907	630	463	354	280	227	145	101	75	57
3200K	15° Center (lx)	8366	4706	3011	2092	1536	1176	929	753	482	335	246	188
	30° Center (lx)	2568	1445	924	642	471	361	286	231	148	103	76	58
5600K	15° Center (lx)	8664	4873	3119	2166	1592	1218	963	780	499	347	254	195
	30° Center (lx)	2659	1495	958	665	488	374	295	239	153	106	78	60
Single red	15° Center (lx)	757	426	273	189	139	106	84	68	44	30	22	17
	30°center(LUX)	223	125	80	56	41	32	25	20	13	8	6	5
Single green	15° Center (lx)	4313	2427	1553	1078	793	607	479	389	249	172	127	97
	30° Center (lx)	1320	742	475	330	243	186	147	119	76	53	39	29
Single blue	15° Center (lx)	845	476	305	211	155	119	93	76	48	34	25	19
	30° Center (lx)	333	187	120	83	61	47	37	30	19	14	9	7

25°–50° Full-Color LED Zoom Profile Spotlight

Throw Distance (m)		3	4	5	6	7	8	9	10	11	12	13	14	15
25° Beam Diameter (m)		1.33	1.77	2.22	2.66	3.1	3.55	3.99	4.43	4.88	5.32	5.76	6.21	6.65
50° Beam Diameter (m)		2.8	3.73	4.66	5.6	6.52	7.46	8.39	9.32	10.3	1.21	12.12	13.05	14
2700K	25° Center (lx)	2205	1240	794	551	405	310	245	199	164	138	118	101	88
	50° Center (lx)	705	397	254	177	130	99	78	63	52	44	38	32	29
3200K	25° Center (lx)	2307	1298	831	577	424	325	257	208	172	144	123	106	92
	50° Center (lx)	740	416	266	185	136	104	82	66	55	46	40	34	29
5600K	25° Center (lx)	2399	1351	864	600	441	338	267	216	178	150	128	110	96
	50° Center (lx)	793	446	285	199	145	111	88	72	59	50	42	37	31
Single red	2° Center (lx)	211	119	76	52	39	29	23	19	16	13	11	9	8
	50° Center (lx)	63	35	22	16	11	9	7	6	5	4	4	3	3
Single green	25° Center (lx)	1212	682	436	303	223	170	134	109	90	75	64	56	49
	50° Center (lx)	403	226	145	100	74	57	45	36	30	25	21	18	17
Single blue	25° Center (lx)	290	163	104	73	53	40	32	26	21	18	16	13	12
	50° Center (lx)	72	40	26	18	13	10	8	6	6	5	4	4	3