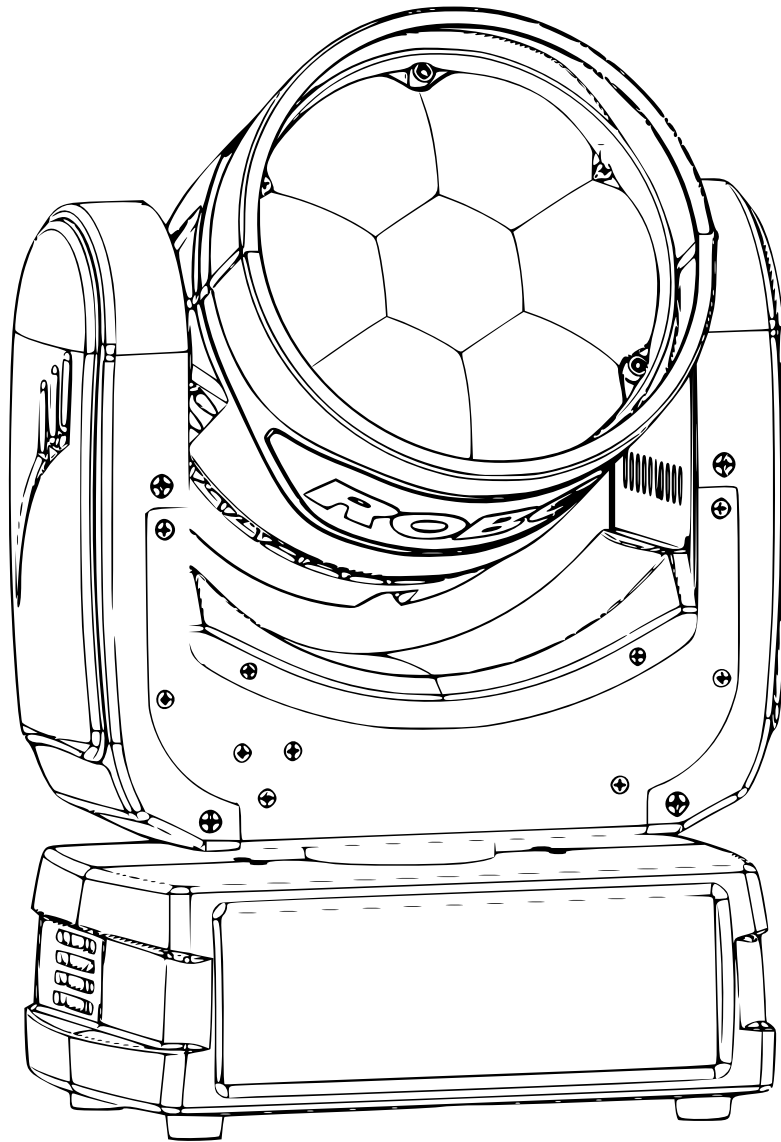


LEDBeam 150™



ROBE®

LEDBeam 150

Photometric report

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LEDBeam 150

Photometric report

Total Lumen output measurements

Total lumen output is measured by a Goniophotometer device according to EN 13032-1 within our state of the art ROBE lighting Ltd. photometric laboratory. We measure light emitted from the fixture at all radiating angles for minimum, maximum and mid zoom range. As a confirmation method we also measure lumens on the wall. Data from both measurements are processed in the software to calculate all photometric data. We provide photometric data in IES and LDT file and photometric report that includes spectrum, light distribution, TM30-15 and TLCI report.

Measurement conditions

For absolute consistency the Climate room temperature is 25°C. Fixtures are operated for at least 30 minutes for stabilization. Measurement angles used: -90° to +90° pan (-90° to +90° tilt), step 1°. A step angle of 10° is used for fixtures with elliptical or asymmetrical light output. Distances used are 5 m or 10 m.

All fixtures to produce the data are calibrated and checked for several photometric parameters, such as Intensity, CCT, CRI and duv, to meet all the specified values.

Equipment

Konica Minolta Illuminance Spectrophotometer CL-500A

Konica Minolta Illuminance Colour Meter CL-200A

Konica Minolta CRI Illuminance meter CL-70F

PRC Krochmann Radiolux 111

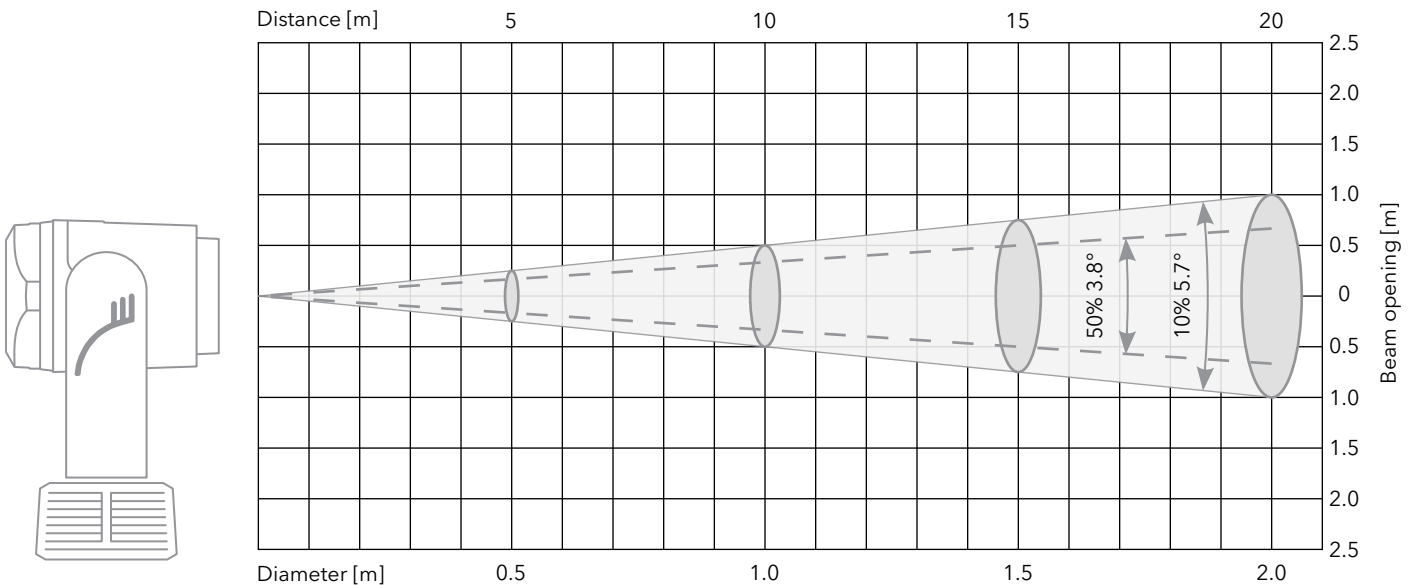
- Photometric measurement head
- UVA and UVC measurement head

LEDBeam 150

Photometric report

Beam angle 3.8° - Min. zoom

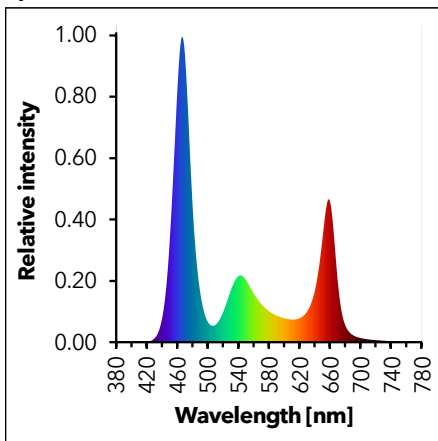
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
3.8°	1518 lm	1380 lm	305000 cd	172 W



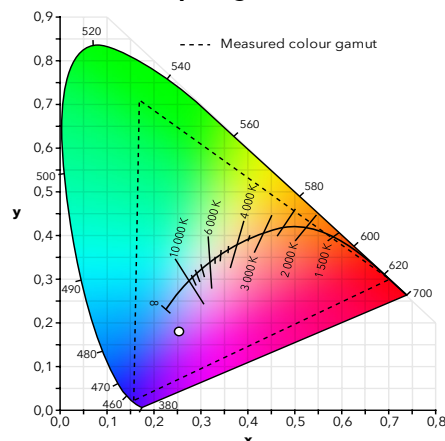
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	12200/1133	3050/283	1356/126	763/71	488/45	339/31	249/23	1380
Red	2520/234	630/59	280/26	158/15	101/9	70/7	51/4.8	285
Green	4790/445	1198/111	532/49	299/28	192/18	133/12	98/9	542
Blue	1080/100	270/25	120/11	68/6	43/4	30/2.8	22/2	122
White	6100/567	1525/142	678/63	381/35	244/23	169/16	124/12	690

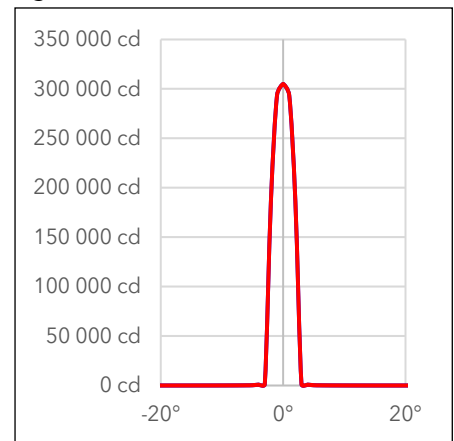
Spectrum



CIE 1931 color space gamut



Light distribution



Color temperature	CCT	N/A
Color Deviation from Black	Duv	N/A
Color Coordinate CIE 1931	x	0.2528
	y	0.1801
Color Coordinate	u	0.2172
	v	0.2321

Color rendering index	CRI	N/A
Red component	CRI R9	N/A
Color fidelity	TM30 Rf	N/A
Color gamut	TM30 Rg	N/A
Television consistency Index	TLCI	N/A

Fixture settings: DMX mode: 1; White Point 8000K Off; Fans mode: Auto

Measurement date: 13.04.2017

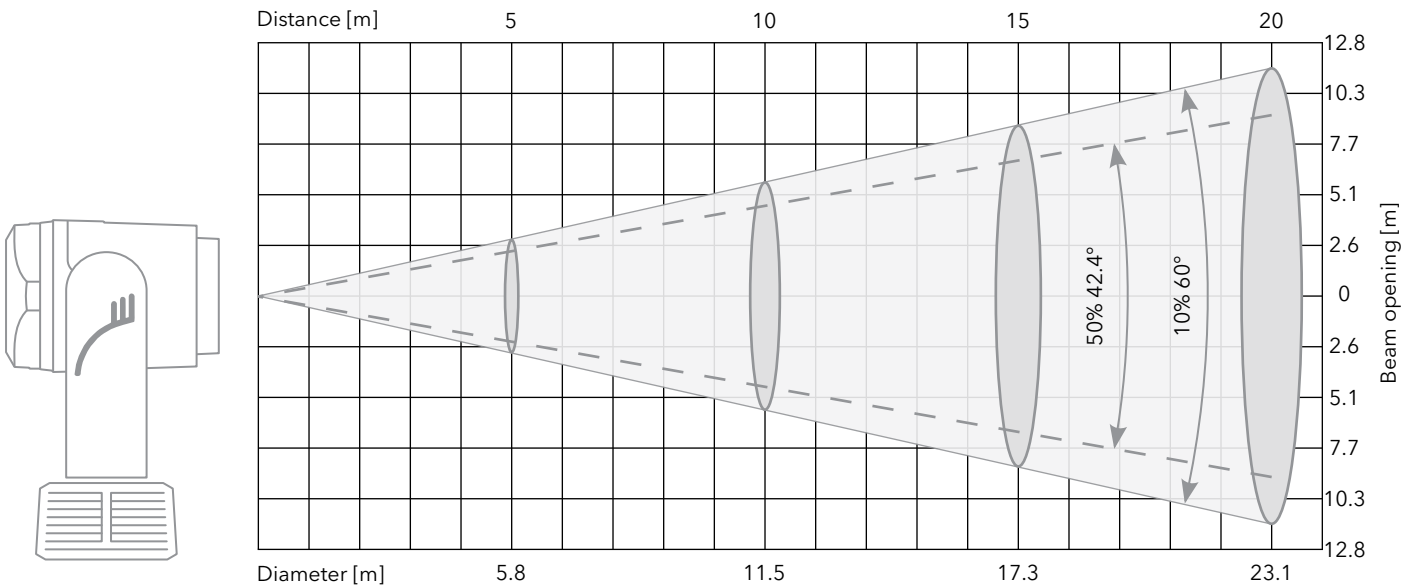


LEDBeam 150

Photometric report

Field angle 60° - Max. zoom

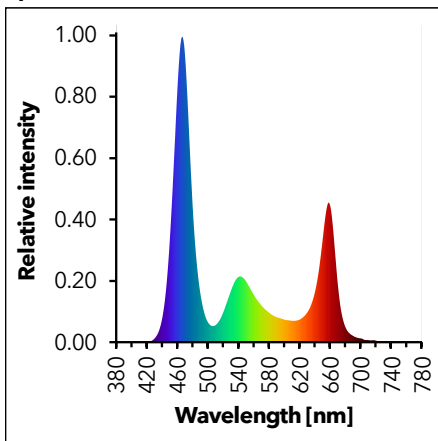
Field angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
60°	3553 lm	2842 lm	6675 cd	172 W



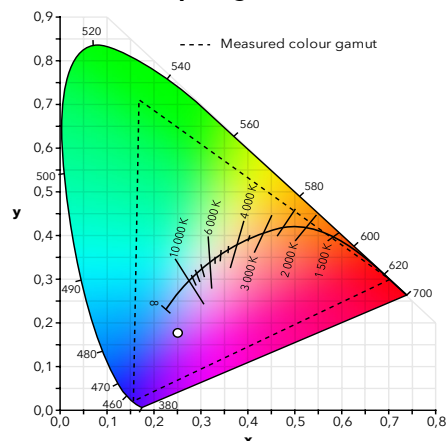
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	267/25	67/6	30/2.8	17/1.6	11/1	7/0.7	5/0.5	2842
Red	56/5	14/1.3	6/0.6	3.5/0.3	2.2/0.2	1.6/0.1	1.1/0.1	596
Green	108/10	27/2.5	12/1.1	7/0.6	4.3/0.4	3/0.3	2.2/0.2	1150
Blue	23/2.1	6/0.5	2.6/0.2	1.4/0.1	0.9/0.1	0.6/0.1	0.5/0	245
White	134/12	34/3.1	15/1.4	8/0.8	5/0.5	3.7/0.3	2.7/0.3	1426

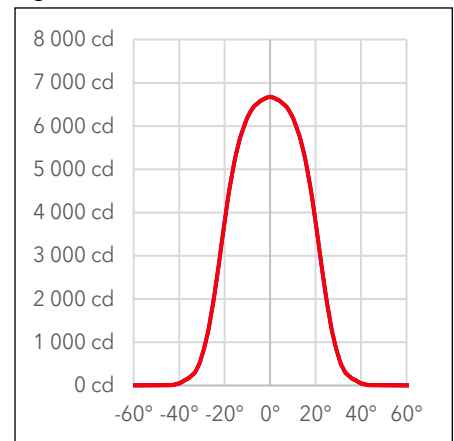
Spectrum



CIE 1931 color space gamut



Light distribution



Color temperature	CCT	N/A
Color Deviation from Black	Duv	N/A
Color Coordinate CIE 1931	x	0.2501
	y	0.1768
Color Coordinate	u	0.2165
	v	0.2295

Color rendering index	CRI	N/A
Red component	CRI R9	N/A
Color fidelity	TM30 Rf	N/A
Color gamut	TM30 Rg	N/A
Television consistency Index	TLCI	N/A

Fixture settings: DMX mode: 1; White Point 8000K Off; Fans mode: Auto

Measurement date: 13.04.2017

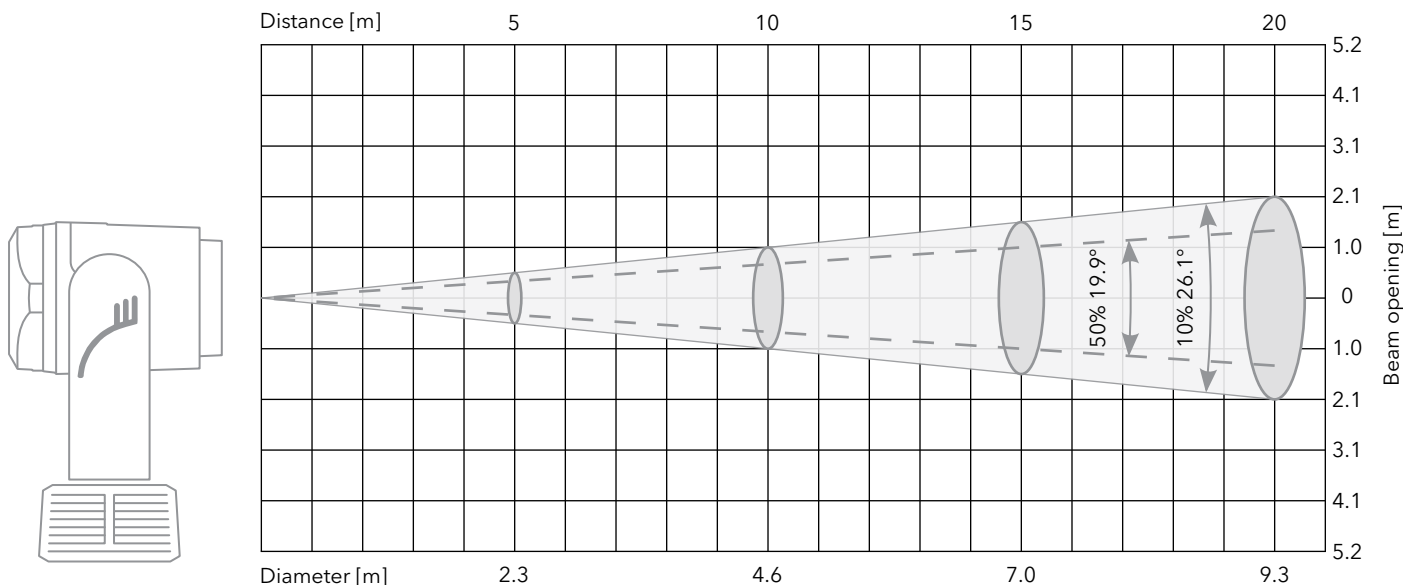


LEDBeam 150

Photometric report

Field angle 26.1° - Mid. zoom

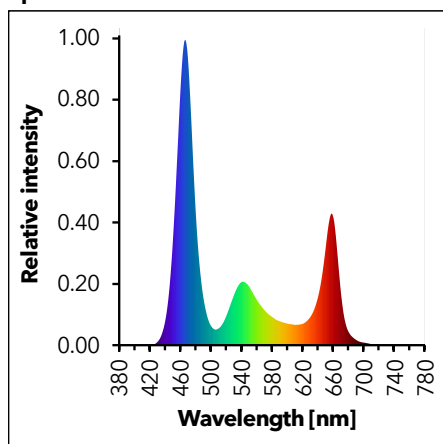
Field angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
26.1°	2885 lm	2308 lm	24700 cd	172 W



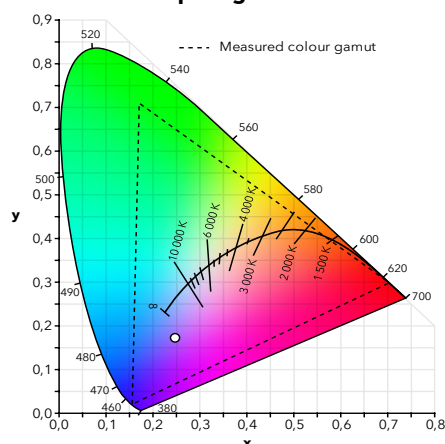
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	988/92	247/23	110/10	62/6	40/3.7	27/2.5	20/1.9	2308
Red	204/19	51/4.7	23/2.1	13/1.2	8/0.8	6/0.5	4.2/0.4	477
Green	388/36	97/9	43/4	24/2.3	16/1.4	11/1	8/0.7	906
Blue	87/8	22/2	10/0.9	5/0.5	3.5/0.3	2.4/0.2	1.8/0.2	203
White	494/46	124/11	55/5	31/2.9	20/1.8	14/1.3	10/0.9	1154

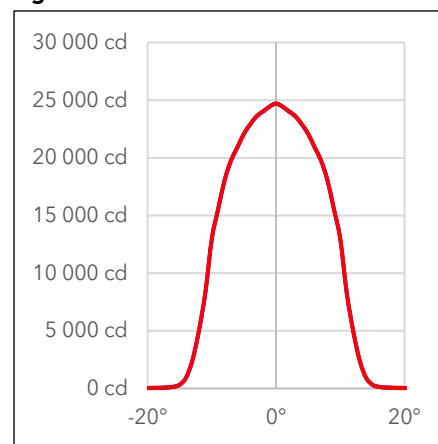
Spectrum



CIE 1931 color space gamut



Light distribution



Color temperature	CCT	N/A
Color Deviation from Black	Duv	N/A
Color Coordinate CIE 1931	x	0.2465
	y	0.1724
Color Coordinate	u	0.2155
	v	0.2261

Color rendering index	CRI	N/A
Red component	CRI R9	N/A
Color fidelity	TM30 Rf	N/A
Color gamut	TM30 Rg	N/A
Television consistency Index	TLCI	N/A

Fixture settings: DMX mode: 1; White Point 8000K Off; Fans mode: Auto

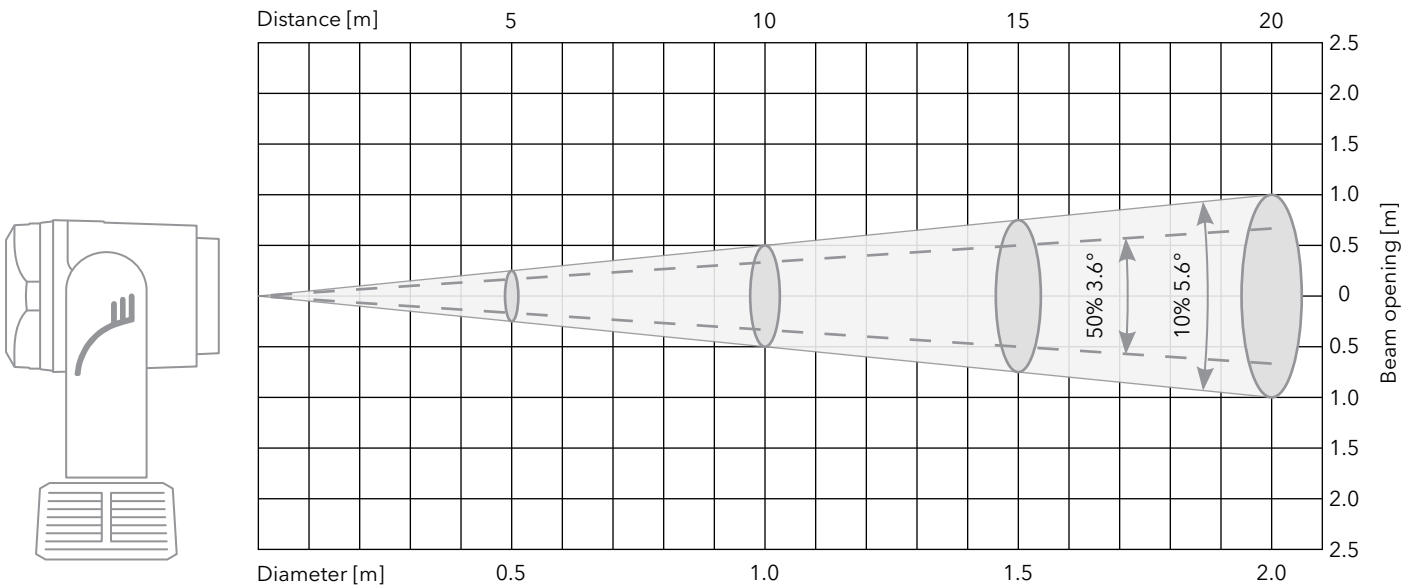
Measurement date: 13.04.2017

LEDBeam 150

Photometric report

Beam angle 3.6° - Min. zoom (with EggCrate)

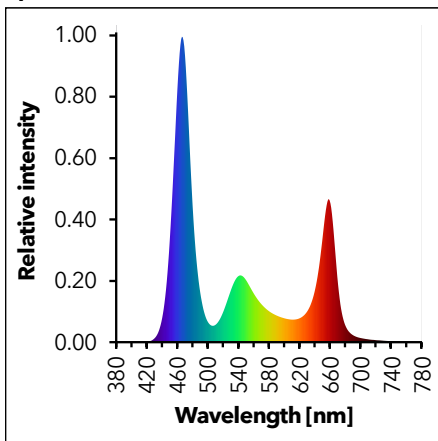
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
3.6°	1257 lm	1143 lm	300750 cd	172 W



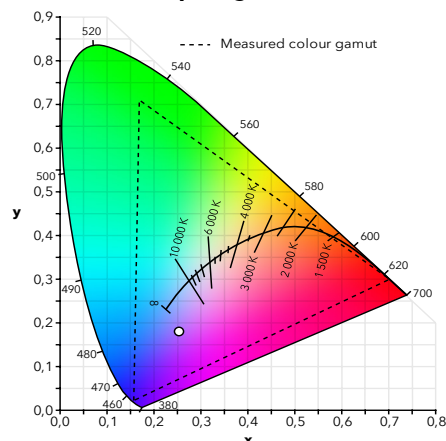
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	12030/1117.6	3007.5/279.4	1336.7/124.2	751.9/69.9	481.2/44.7	334.2/31	245.5/22.8	1143
Red	2500/232.3	625/58.1	277.8/25.8	156.3/14.5	100/9.3	69.4/6.5	51/4.7	238
Green	4760/442.2	1190/110.6	528.9/49.1	297.5/27.6	190.4/17.7	132.2/12.3	97.1/9	452
Blue	1070/99.4	267.5/24.9	118.9/11	66.9/6.2	42.8/4	29.7/2.8	21.8/2	102
White	6030/560.2	1507.5/140.1	670/62.2	376.9/35	241.2/22.4	167.5/15.6	123.1/11.4	573

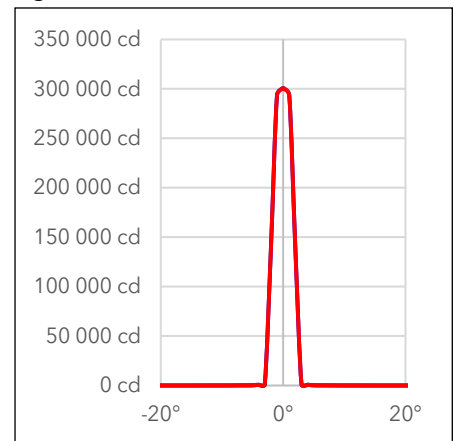
Spectrum



CIE 1931 color space gamut



Light distribution



Color temperature	CCT	N/A
Color Deviation from Black	Duv	N/A
Color Coordinate CIE 1931	x	0.2528
	y	0.1801
Color Coordinate	u	0.2172
	v	0.2321

Color rendering index	CRI	N/A
Red component	CRI R9	N/A
Color fidelity	TM30 Rf	N/A
Color gamut	TM30 Rg	N/A
Television consistency Index	TLCI	N/A

Fixture settings: DMX mode: 1; White Point 8000K Off; Fans mode: Auto

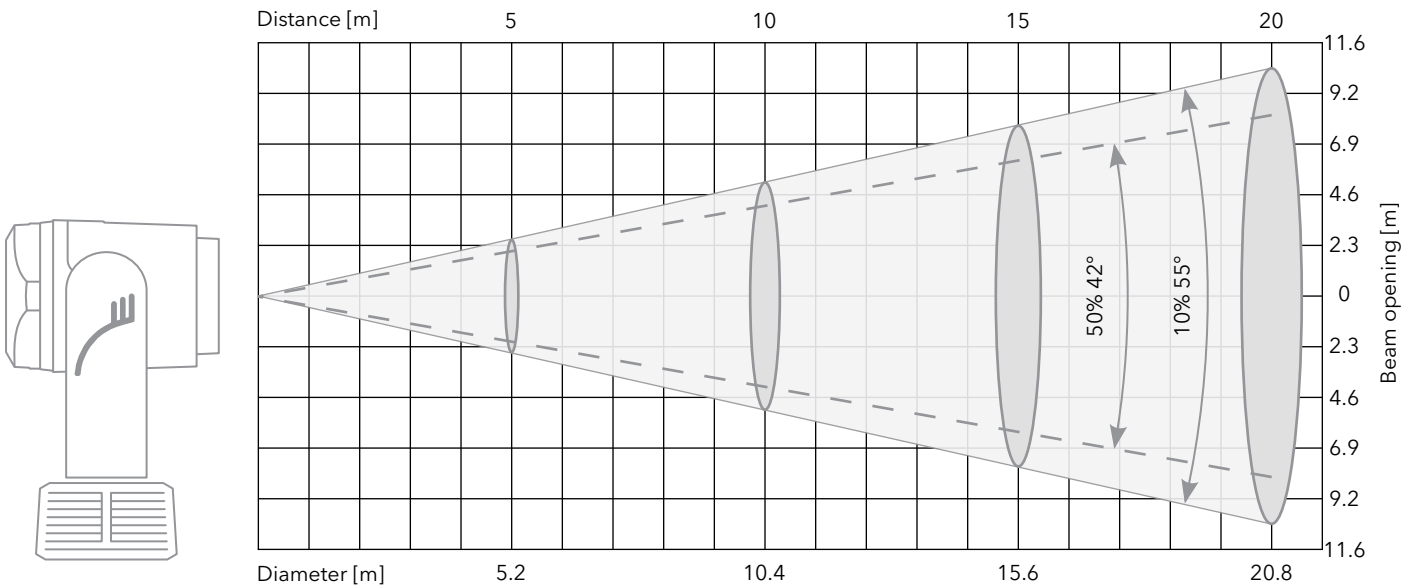
Measurement date: 13.04.2017

LEDBeam 150

Photometric report

Field angle 55° - Max. zoom (with EggCrate)

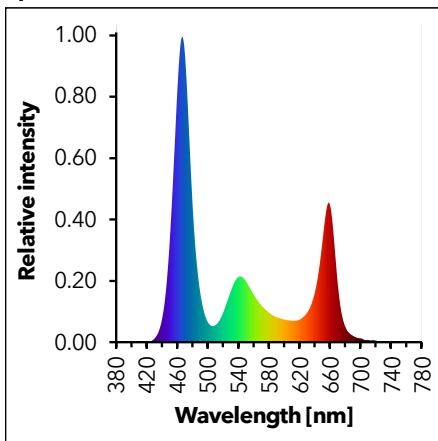
Field angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
55°	3268 lm	2614 lm	6000 cd	172 W



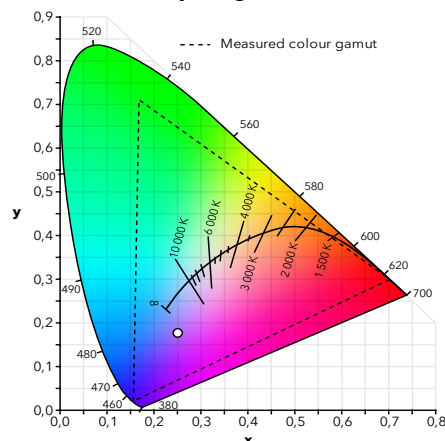
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	240/22.3	60/5.6	26.7/2.5	15/1.4	9.6/0.9	6.7/0.6	4.9/0.5	2614
Red	50/4.6	12.5/1.2	5.6/0.5	3.1/0.3	2/0.2	1.4/0.1	1/0.1	545
Green	104/9.7	26/2.4	11.6/1.1	6.5/0.6	4.2/0.4	2.9/0.3	2.1/0.2	1133
Blue	22/2	5.5/0.5	2.4/0.2	1.4/0.1	0.9/0.1	0.6/0.1	0.4/0	240
White	125/11.6	31.3/2.9	13.9/1.3	7.8/0.7	5/0.5	3.5/0.3	2.6/0.2	1361

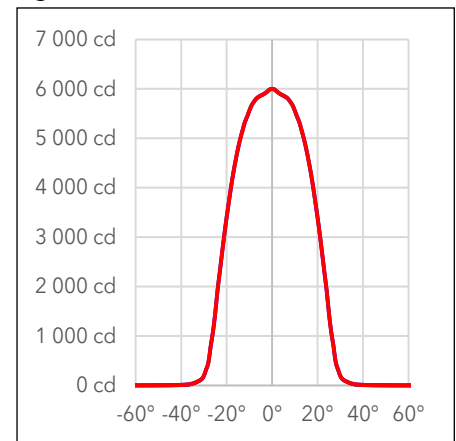
Spectrum



CIE 1931 color space gamut



Light distribution



Color temperature	CCT	N/A
Color Deviation from Black	Duv	N/A
Color Coordinate CIE 1931	x	0.2501
	y	0.1768
Color Coordinate	u	0.2165
	v	0.2295

Color rendering index	CRI	N/A
Red component	CRI R9	N/A
Color fidelity	TM30 Rf	N/A
Color gamut	TM30 Rg	N/A
Television consistency Index	TLCI	N/A

Fixture settings: DMX mode: 1; White Point 8000K Off; Fans mode: Auto

Measurement date: 13.04.2017

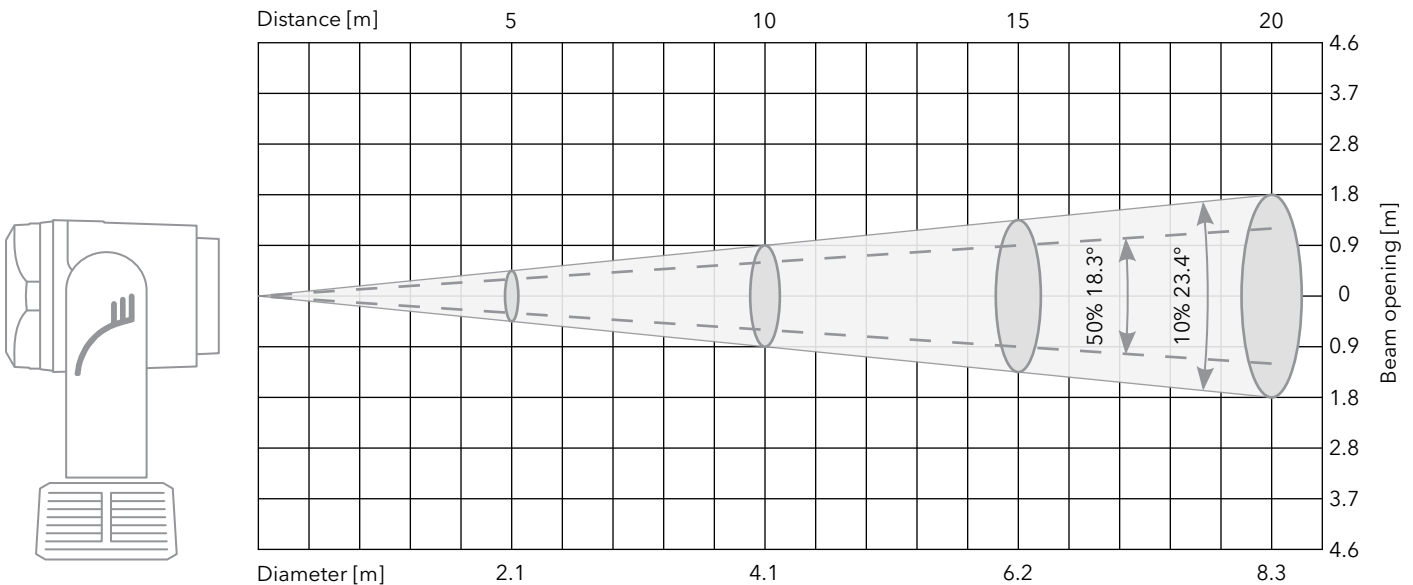


LEDBeam 150

Photometric report

Field angle 23.4° - Mid. Zoom (with EggCrate)

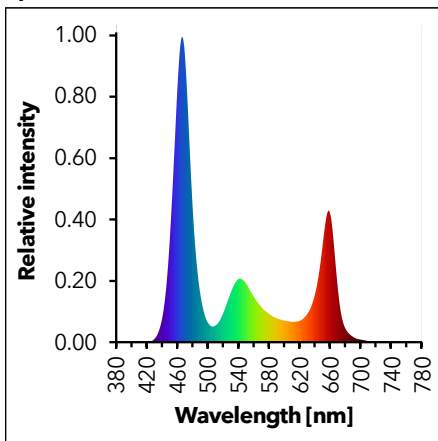
Field angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
23.4°	2398 lm	1918 lm	23450 cd	172 W



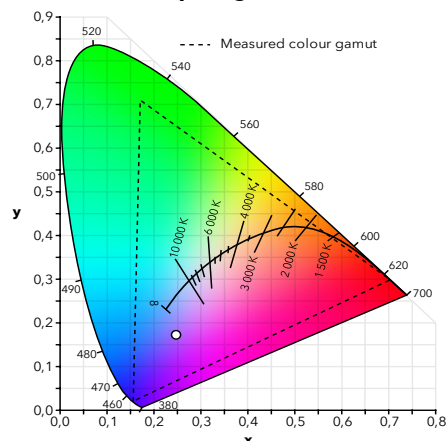
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	938/87.1	234.5/21.8	104.2/9.7	58.6/5.4	37.5/3.5	26.1/2.4	19.1/1.8	1918
Red	195/18.1	48.8/4.5	21.7/2	12.2/1.1	7.8/0.7	5.4/0.5	4/0.4	399
Green	371/34.5	92.8/8.6	41.2/3.8	23.2/2.2	14.8/1.4	10.3/1	7.6/0.7	759
Blue	83/7.7	20.8/1.9	9.2/0.9	5.2/0.5	3.3/0.3	2.3/0.2	1.7/0.2	170
White	470/43.7	117.5/10.9	52.2/4.9	29.4/2.7	18.8/1.7	13.1/1.2	9.6/0.9	961

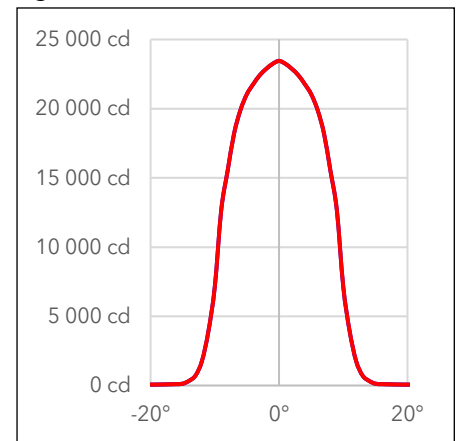
Spectrum



CIE 1931 color space gamut



Light distribution



Color temperature	CCT	N/A
Color Deviation from Black	Duv	N/A
Color Coordinate CIE 1931	x	0.2465
	y	0.1724
Color Coordinate	u	0.2155
	v	0.2261

Color rendering index	CRI	N/A
Red component	CRI R9	N/A
Color fidelity	TM30 Rf	N/A
Color gamut	TM30 Rg	N/A
Television consistency Index	TLCI	N/A

Fixture settings: DMX mode: 1; White Point 8000K Off; Fans mode: Auto

Measurement date: 13.04.2017

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