

ColorSource™ Spot Photometry Guide

ColorSource Series



ColorSource Spot

ColorSource Spot - Fresnel Adapter



Throw Distance Multiplier (TDM)

To determine the distance from the center of the beam (Origin) to a certain illuminance level at a particular distance, multiply the desired throw distance by the TDM desired on the Iso-Illuminance diagram.

Throw Distance (TD) x Throw Distance Multiplier (TDM) = Distance from the Origin (DfO) (distance from the center of the beam)

Example: 25 feet (TD) x 0.047 (TDM) = 1.175 feet from center of beam (DfO)

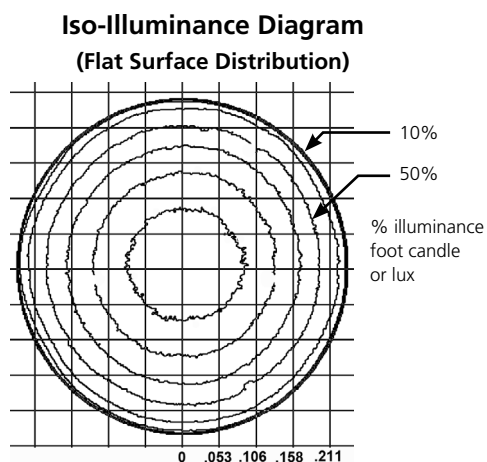


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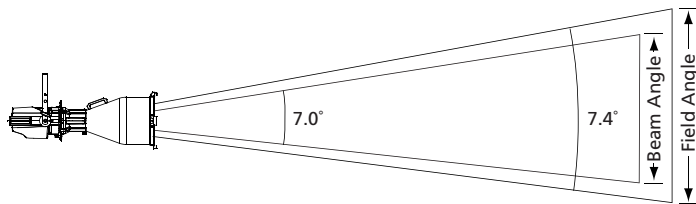
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ColorSource Series

ColorSource Spot 5°

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	5°	397,563	3,979	3,765	160	24.9
At 3200K	5°	358,269	3,609	3,428	115	31.4
At 5600K	5°	373,500	3,752	3,577	141	26.6

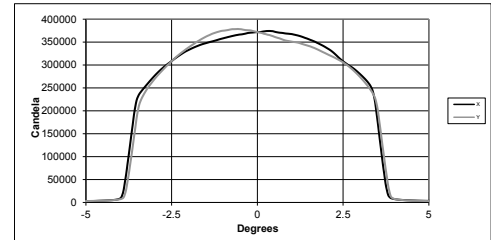
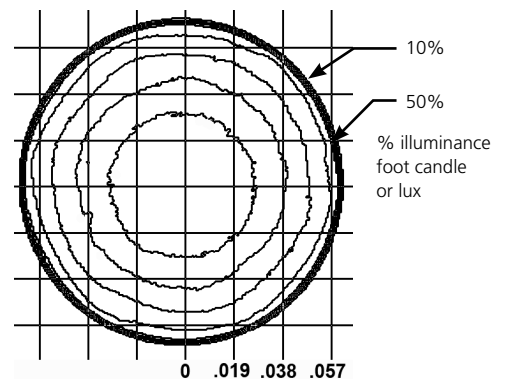
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



Throw Distance (d)	10'	15'	20'	30'	611.9'
	3.0m	4.6m	6.1m	9.1m	186.5m
Field Diameter	1.3'	1.9'	2.6'	3.9'	—
	0.4m	0.6m	0.8m	1.2m	
Illuminance (fc)	3,744	1,664	936	416.0	1
Illuminance (lux)	40,302	17,912	10,075	4,478	10.76

For field diameter at any distance, multiply distance by 0.129
For beam diameter at any distance, multiply by 0.122

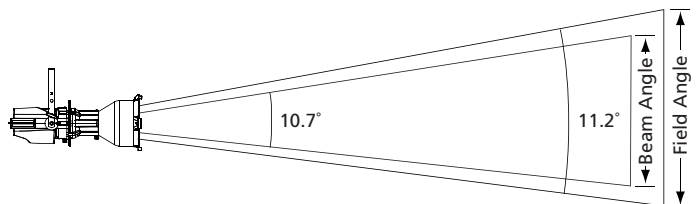
Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

ColorSource Spot 10°

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	10°	242,720	4,985	4,582	160	31.2
Regulated 3200K	10°	218,731	4,522	4,172	115	39.3
Regulated 5600K	10°	228,029	4,700	4,354	141	33.3

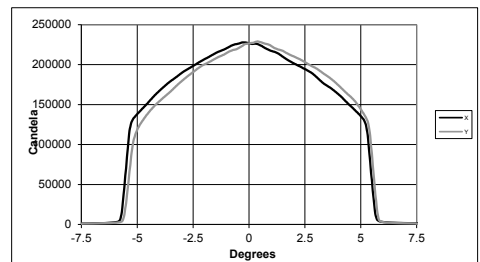
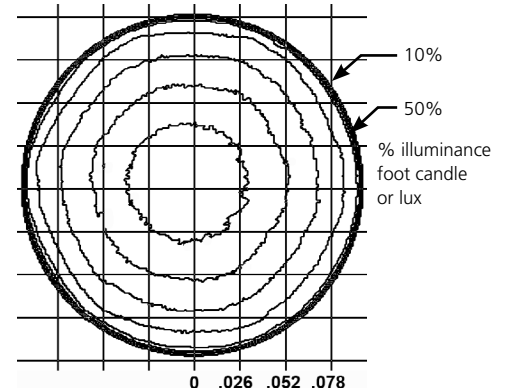
Metric Conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



Throw Distance (d)	10'	15'	20'	30'	492.7'
	3.0m	4.6m	6.1m	9.1m	150.2m
Field Diameter	2.0'	2.9'	3.9'	5.9'	—
	0.6m	0.9m	1.2m	1.8m	
Illuminance (fc)	2,427	1,079	607	269.7	1
Illuminance (lux)	26,126	11,612	6,532	2,903	10.76

For field diameter at any distance, multiply distance by 0.196
For beam diameter at any distance, multiply by 0.187

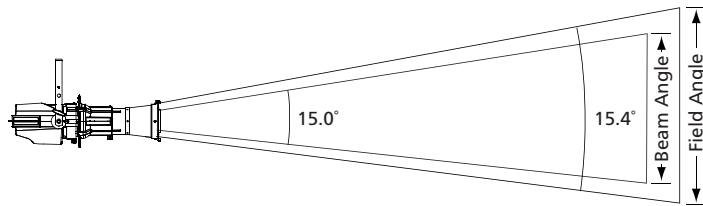
Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

ColorSource Spot 14°

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	14°	120,344	4,983	4,747	160	31.1
At 3200K	14°	108,449	4,520	4,322	115	39.3
At 5600K	14°	113,060	4,699	4,510	141	33.3

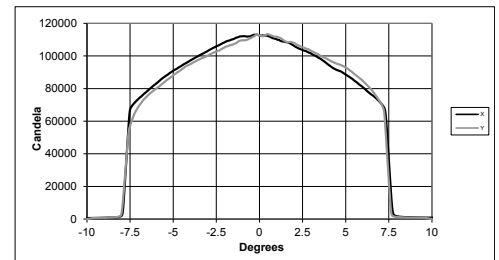
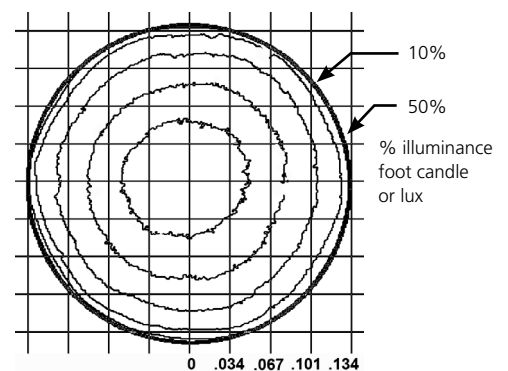
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



Throw Distance (d)	10'	15'	20'	30'	346.9'
	3.0m	4.6m	6.1m	9.1m	105.7m
Field Diameter	2.7'	4.1'	5.4'	8.1'	—
	0.8m	1.2m	1.6m	2.5m	
Illuminance (fc)	1,203	535	301	133.7	1
Illuminance (lux)	12,954	5,757	3,238	1,439	10.76

For field diameter at any distance, multiply distance by 0.270
For beam diameter at any distance, multiply by 0.263

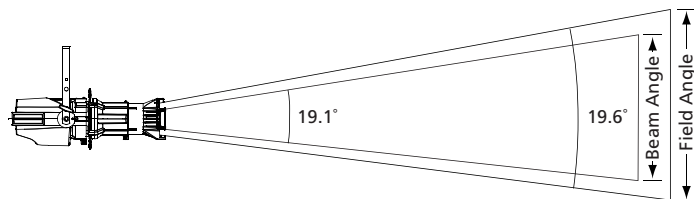
Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

ColorSource Spot 19° EDLT

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	19°	75,485	5,115	4,800	160	32.0
At 3200K	19°	68,024	4,640	4,371	115	40.3
At 5600K	19°	70,916	4,823	4,561	141	34.2

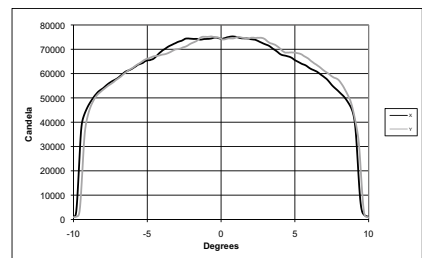
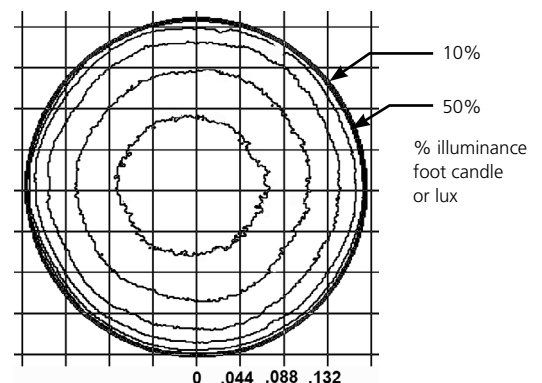
Metric Conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



Throw Distance (d)	10'	15'	20'	30'	274.7'
	3.0m	4.6m	6.1m	9.1m	83.7m
Field Diameter	3.5'	5.2'	6.9'	10.4'	—
	1.1m	1.6m	2.1m	3.2	
Illuminance (fc)	755	335	189	83.9	1
Illuminance (lux)	8,125	3,611	2,031	903	10.76

For field diameter at any distance, multiply distance by 0.345
For beam diameter at any distance, multiply by 0.336

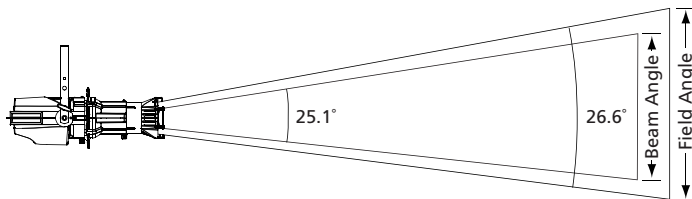
Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

ColorSource Spot 26° EDLT

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	26°	52,210	6,105	5,251	160	38.2
At 3200K	26°	47,050	5,538	4,781	115	48.2
At 5600K	26°	49,050	5,757	4,989	141	40.8

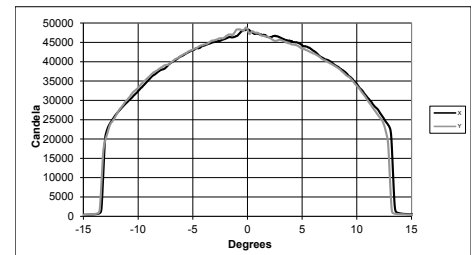
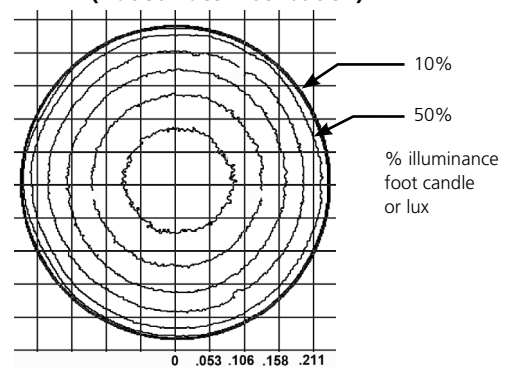
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



Throw Distance (d)	10'	15'	20'	30'	221.7'
	3.0m	4.6m	6.1m	9.1m	67.6m
Field Diameter	4.7'	7.1'	9.5'	14.2'	—
	1.4m	2.2m	2.9m	4.3m	
Illuminance (fc)	492	219	123	54.6	1
Illuminance (lux)	5,293	2,352	1,323	588	10.76

For field diameter at any distance, multiply distance by 0.473
For beam diameter at any distance, multiply by 0.445

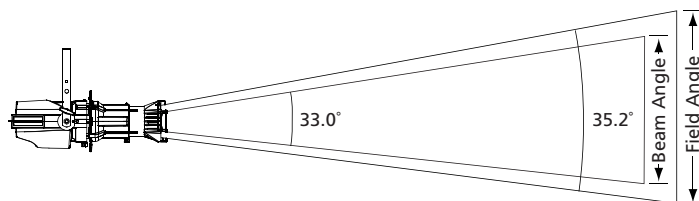
Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

ColorSource Spot 36° EDLT

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	36°	29,053	5,887	4,775	160	36.8
At 3200K	36°	26,181	5,340	4,347	115	46.4
At 5600K	36°	27,294	5,551	4,537	141	39.4

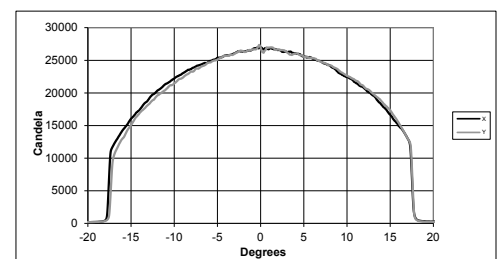
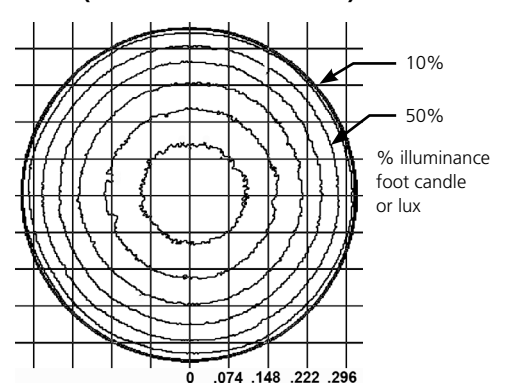
Metric Conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



Throw Distance (d)	10'	15'	20'	30'	170.4'
	3.0m	4.6m	6.1m	9.1m	52.0
Field Diameter	6.3'	9.5'	12.7'	19.0'	—
	1.9m	2.9m	3.9m	5.8m	
Illuminance (fc)	291	129	73	32.3	1
Illuminance (lux)	3,127	1,390	782	347	10.76

For field diameter at any distance, multiply distance by 0.634
For beam diameter at any distance, multiply by 0.592

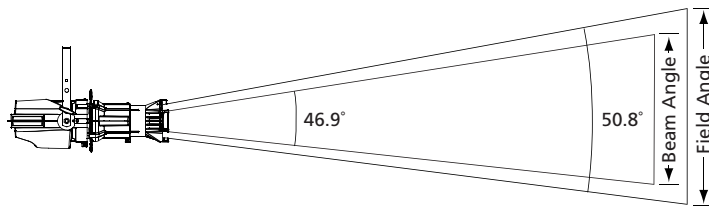
Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

ColorSource Spot 50° EDLT

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	50°	14,370	5,926	4,190	160	37.0
At 3200K	50°	12,950	5,375	3,815	115	46.7
At 5600K	50°	13,501	5,588	3,981	141	39.6

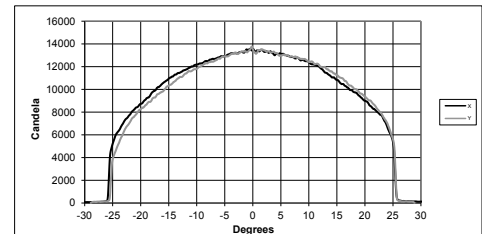
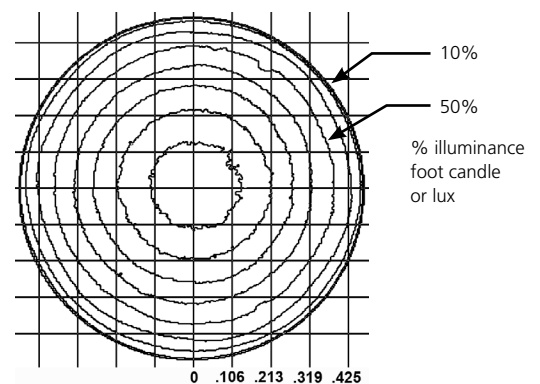
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



Throw Distance (d)	10'	15'	20'	30'	119.9'
	3.0m	4.6m	6.1m	9.1m	36.5m
Field Diameter	9.5'	14.2'	19.0'	28.5'	—
	2.9m	4.3m	5.8m	8.7m	
Illuminance (fc)	144	64	36	16.0	1
Illuminance (lux)	1,547	687	387	172	10.76

For field diameter at any distance, multiply distance by 0.950
For beam diameter at any distance, multiply by 0.868

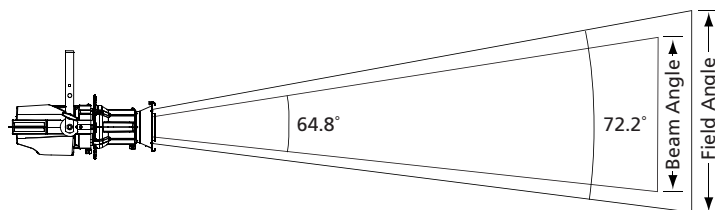
Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

ColorSource Spot 70°

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	70°	9,005	6,940	3,757	160	43.4
At 3200K	70°	8,115	6,296	3,420	115	54.7
At 5600K	70°	8,460	6,544	3,569	141	46.4

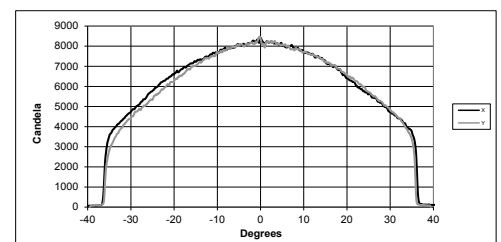
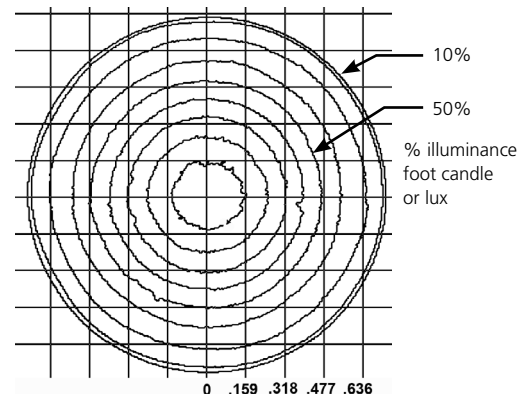
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



Throw Distance (d)	10'	15'	20'	30'	94.9'
	3.0m	4.6m	6.1m	9.1m	28.9m
Field Diameter	14.6'	21.9'	29.2'	43.8'	—
	4.4m	6.7m	8.9m	13.3m	
Illuminance (fc)	90	40	23	10.0	1
Illuminance (lux)	969	431	242	108	10.76

For field diameter at any distance, multiply distance by 1.458
For beam diameter at any distance, multiply by 1.269

Candela Plot

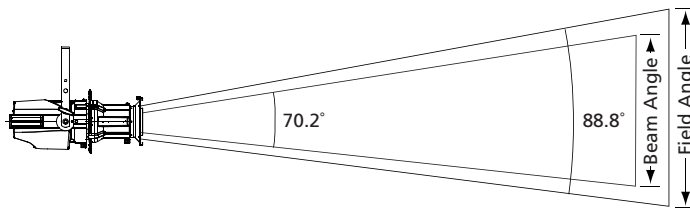
Iso-Illuminance Diagram
(Flat Surface Distribution)

ColorSource Series

ColorSource Spot 90°

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	90°	6,894	6,792	3,140	160	42.4
At 3200K	90°	6,212	6,161	2,859	115	53.6
At 5600K	90°	6,476	6,405	2,983	141	45.4

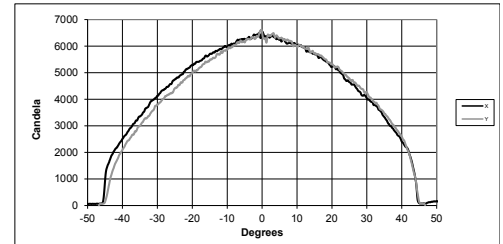
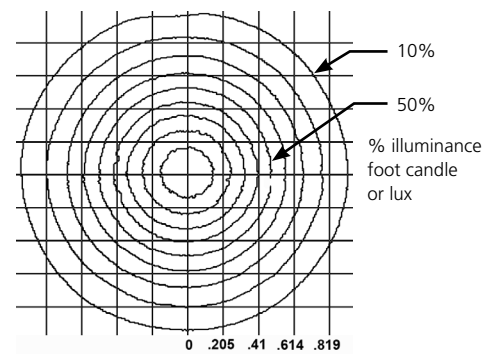
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



Throw Distance (d)	10'	15'	20'	30'	83.0'
	3.0m	4.6m	6.1m	9.1m	25.3m
Field Diameter	19.6'	29.4'	39.2'	58.5'	—
	6.0m	9.0m	11.9m	17.9m	—
Illuminance (fc)	69	31	17	7.7	1
Illuminance (lux)	742	330	186	82	10.76

For field diameter at any distance, multiply distance by 1.959
For beam diameter at any distance, multiply by 1.406

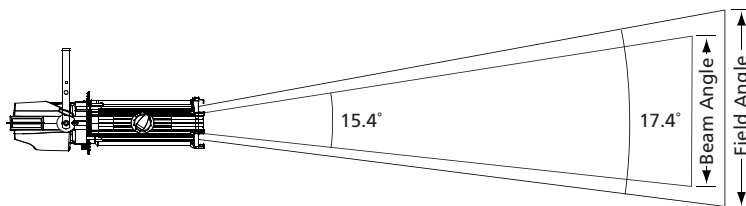
Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

ColorSource Spot 15-30° Zoom Narrow

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	15°	98,331	4,689	3,712	160	29.3
At 3200K	15°	88,612	4,254	3,380	115	37.0
At 5600K	15°	92,379	4,422	3,527	141	31.4

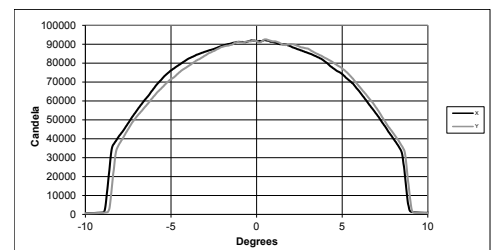
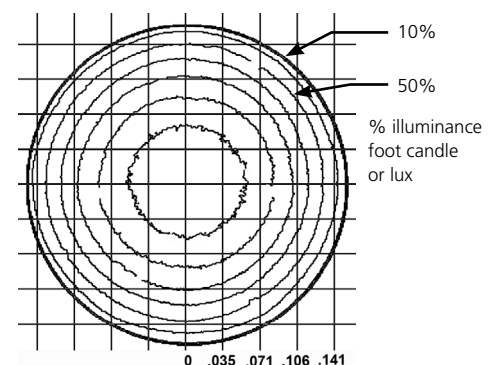
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



Throw Distance (d)	10'	15'	20'	30'	313.6'
	3.0m	4.6m	6.1m	9.1m	95.6m
Field Diameter	3.1'	4.6'	6.1'	9.2'	—
	0.9m	1.4m	1.9m	2.8m	—
Illuminance (fc)	983	437	246	109.3	1
Illuminance (lux)	10,584	4,704	2,646	1,176	10.76

For field diameter at any distance, multiply distance by 0.306
For beam diameter at any distance, multiply by 0.270

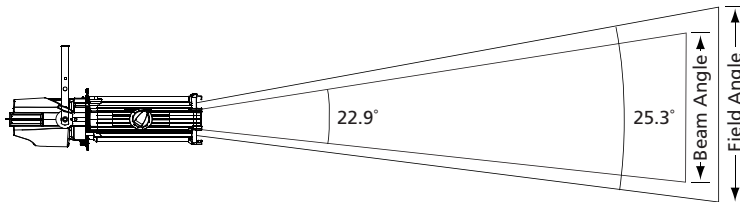
Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

ColorSource Spot 15-30° Zoom Mid

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	23°	54,694	5,368	4,109	160	33.6
At 3200K	23°	49,288	4,870	3,741	115	42.3
At 5600K	23°	51,384	5,062	3,904	141	35.9

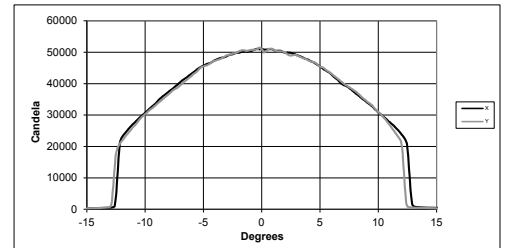
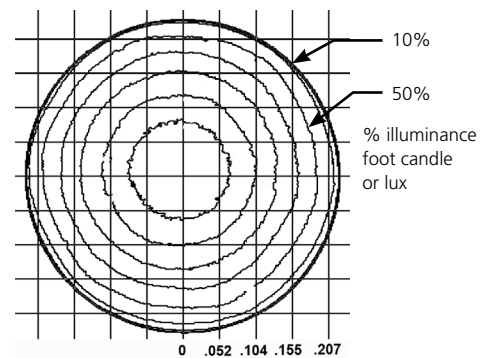
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



Throw Distance (d)	10'	15'	20'	30'	233.9'
	3.0m	4.6m	6.1m	9.1m	71.3m
Field Diameter	4.5'	6.7'	9.0'	13.5'	—
	1.4m	2.1m	2.7m	4.1m	—
Illuminance (fc)	547	243	137	60.8	1
Illuminance (lux)	5,887	2,617	1,472	654	10.76

For field diameter at any distance, multiply distance by 0.449
For beam diameter at any distance, multiply by 0.405

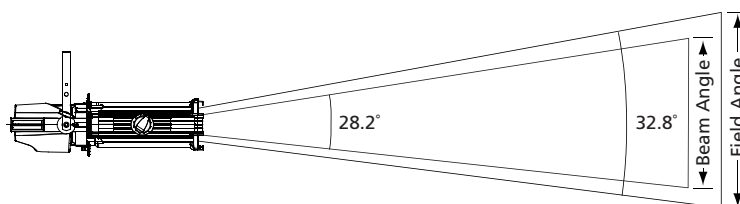
Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

ColorSource Spot Lustr 15-30° Zoom Wide

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	30°	32,520	5,083	3,682	160	31.8
At 3200K	30°	29,306	4,611	3,353	115	40.1
At 5600K	30°	30,552	4,793	3,498	141	34.0

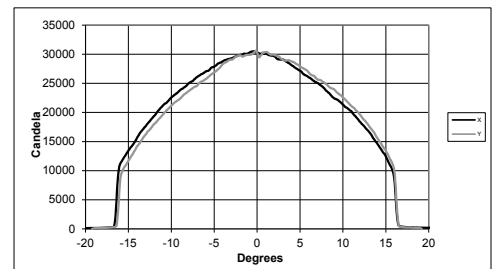
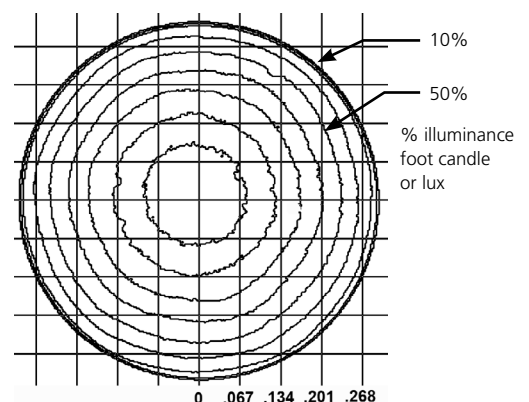
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



Throw Distance (d)	10'	15'	20'	30'	180.3'
	3.0m	4.6m	6.1m	9.1m	55.0m
Field Diameter	5.9'	8.8'	11.8'	17.7'	—
	1.8m	2.7m	3.6m	5.4m	—
Illuminance (fc)	325	145	81	36.1	1
Illuminance (lux)	3,500	1,556	875	389	10.76

For field diameter at any distance, multiply distance by 0.589
For beam diameter at any distance, multiply by 0.502

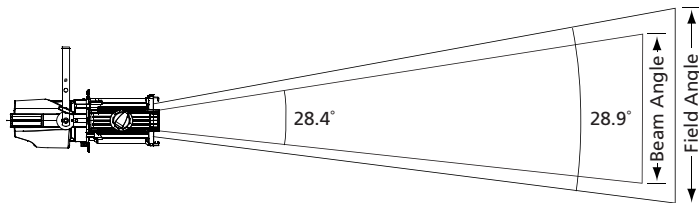
Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

ColorSource Spot 25-50° Zoom Narrow

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	25°	41,624	6,269	5,850	160	39.2
At 3200K	25°	37,510	5,687	5,327	115	49.5
At 5600K	25°	39,104	5,912	5,558	141	41.9

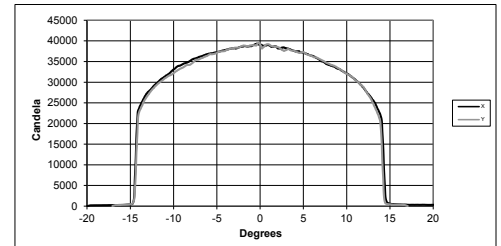
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



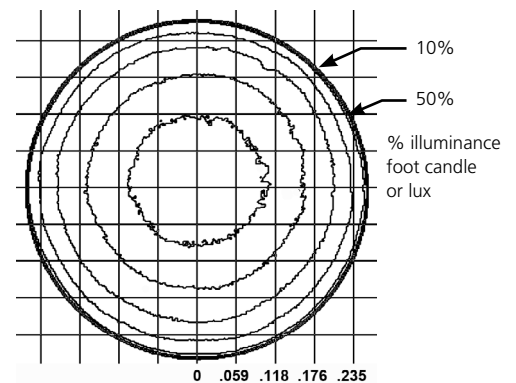
Throw Distance (d)	10'	15'	20'	30'	204.0'
	3.0m	4.6m	6.1m	9.1m	62.2m
Field Diameter	5.2'	7.7'	10.3'	15.5'	—
	1.6m	2.4m	3.1m	4.7m	
Illuminance (fc)	416	185	104	46.2	1
Illuminance (lux)	4,480	1,991	1,120	498	10.76

For field diameter at any distance, multiply distance by 0.515
For beam diameter at any distance, multiply by 0.506

Candela Plot



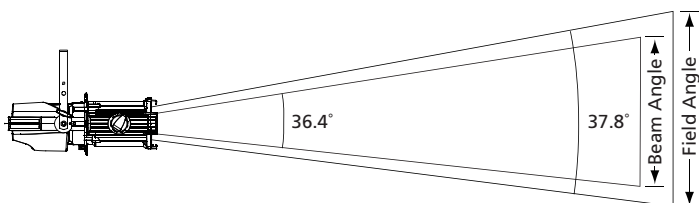
Iso-Illuminance Diagram (Flat Surface Distribution)



ColorSource Spot 25-50° Zoom Mid

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	37°	26,903	6,635	5,621	160	41.5
At 3200K	37°	24,244	6,019	5,118	115	52.3
At 5600K	37°	25,274	6,257	5,341	141	44.4

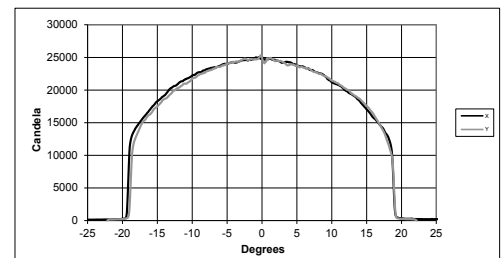
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



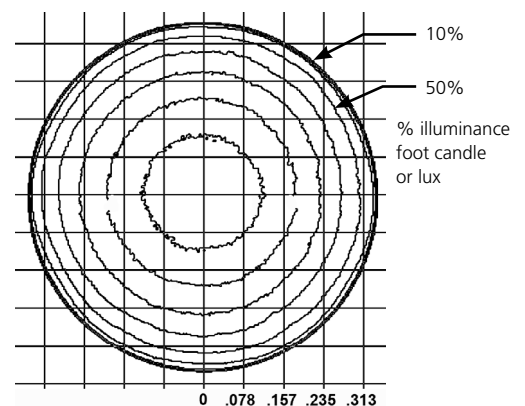
Throw Distance (d)	10'	15'	20'	30'	164.0'
	3.0m	4.6m	6.1m	9.1m	50.0m
Field Diameter	6.8'	10.3'	13.7'	20.5'	—
	2.1m	3.1m	4.2m	6.3m	
Illuminance (fc)	269	120	67	29.9	1
Illuminance (lux)	2,896	1,287	724	322	10.76

For field diameter at any distance, multiply distance by 0.685
For beam diameter at any distance, multiply by 0.658

Candela Plot



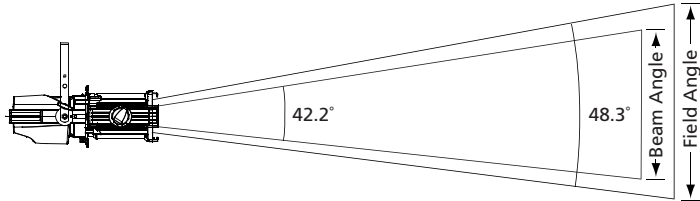
Iso-Illuminance Diagram (Flat Surface Distribution)



ColorSource Spot 25-50° Zoom Wide

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	50°	17,850	6,567	4,303	160	41.0
At 3200K	50°	16,086	5,957	3,918	115	51.8
At 5600K	50°	16,770	6,192	4,088	141	43.9

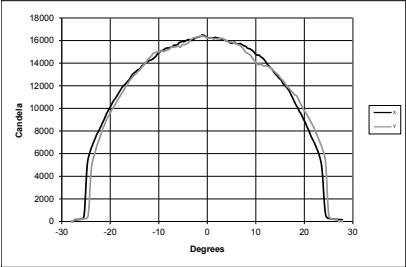
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply footcandles by 10.76



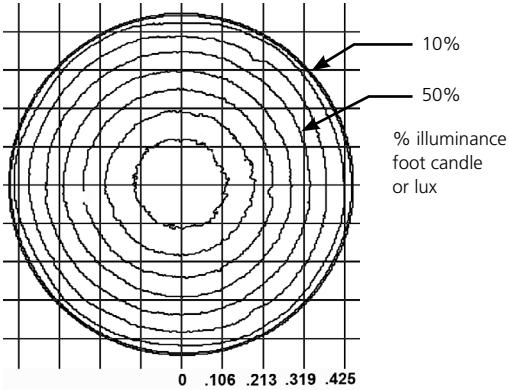
Throw Distance (d)	10'	15'	20'	30'	133.6'
	3.0m	4.6m	6.1m	9.1m	40.7m
Field Diameter	9.0'	13.5'	17.9'	26.9'	—
	2.7m	4.1m	5.5m	8.2m	
Illuminance (fc)	179	79	45	19.8	1
Illuminance (lux)	1,921	854	480	213	10.76

For field diameter at any distance, multiply distance by 0.897
For beam diameter at any distance, multiply by 0.772

Candela Plot



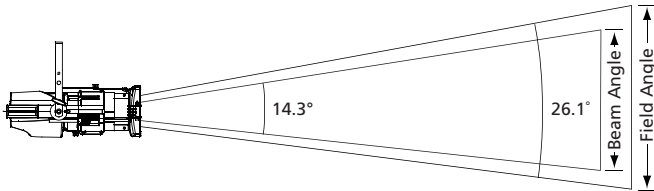
Iso-Illuminance Diagram
(Flat Surface Distribution)



ColorSource Spot with Fresnel Adapter - Spot

Mode	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	72,784	4,459	2,297	160	27.9
At 3200K	65,962	4,041	2,082	115	35.1
At 5600K	68,722	4,210	2,169	141	29.9

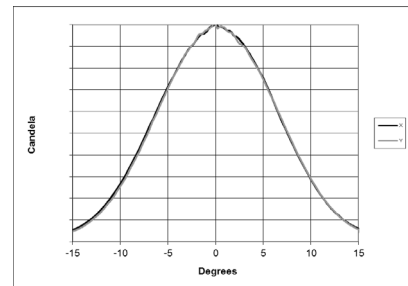
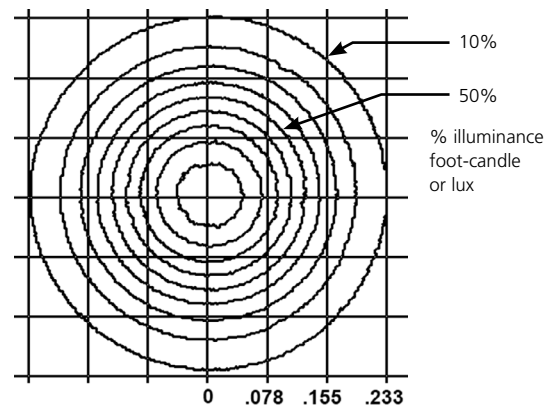
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply foot-candles by 10.76



Throw Distance (d)	10'	15'	20'	30'	269.8'
	3.0m	4.6m	6.1m	9.1m	82.2m
Field Diameter	4.6'	7.0'	9.3'	13.9'	—
	1.4m	2.1m	2.8m	4.2m	—
Illuminance (fc)	728	323	182	80.9	1.0
Illuminance (lux)	7,834	3,482	1,959	870	10.76

For field diameter at any distance, multiply distance by 0.464
For beam diameter at any distance, multiply by 0.251

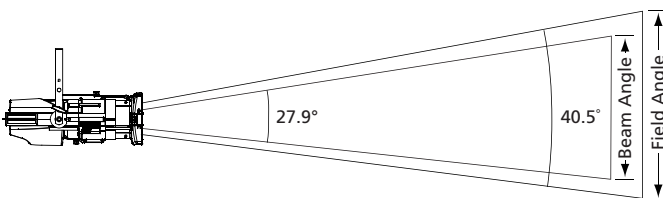
Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

ColorSource Spot with Fresnel Adapter - Mid

Mode	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	33,268	6,290	4,211	160	39.3
At 3200K	30,150	5,701	3,816	115	49.6
At 5600K	31,412	5,939	3,976	141	42.1

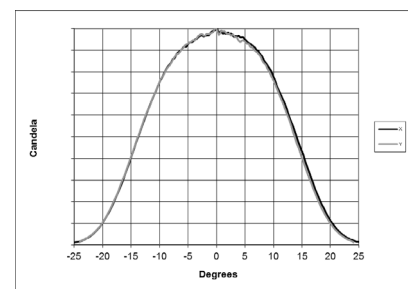
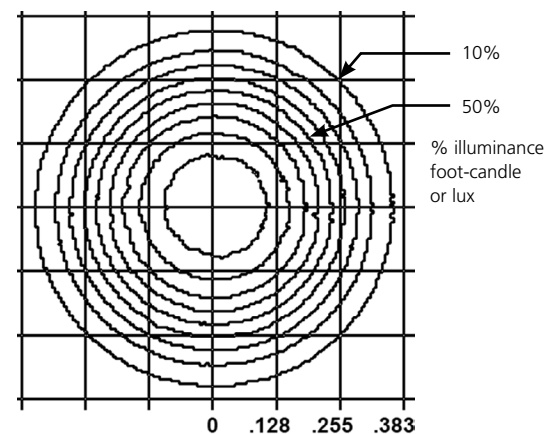
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply foot-candles by 10.76



Throw Distance (d)	10'	15'	20'	30'	182.4'
	3.0m	4.6m	6.1m	9.1m	55.6m
Field Diameter	7.4'	11.1'	14.8'	22.1'	—
	2.2m	3.4m	4.5m	6.7m	—
Illuminance (fc)	333	148	83	37.0	1.0
Illuminance (lux)	3,581	1,592	895	398	10.76

For field diameter at any distance, multiply distance by 0.738
For beam diameter at any distance, multiply by 0.497

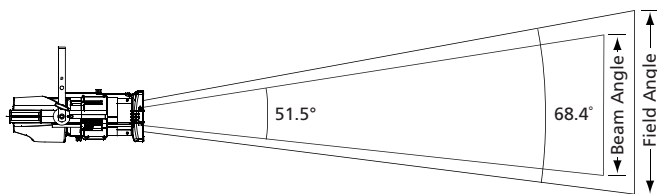
Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

ColorSource Spot with Fresnel Adapter - Flood

Mode	Candela	Field Lumens	Beam Lumens	Power Consumption	Efficacy (lpw)
Maximum Output	11,284	6,475	4,292	160	40.5
At 3200K	10,227	5,868	3,889	115	51.0
At 5600K	10,655	6,113	4,052	141	43.4

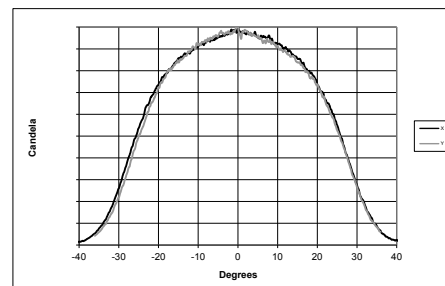
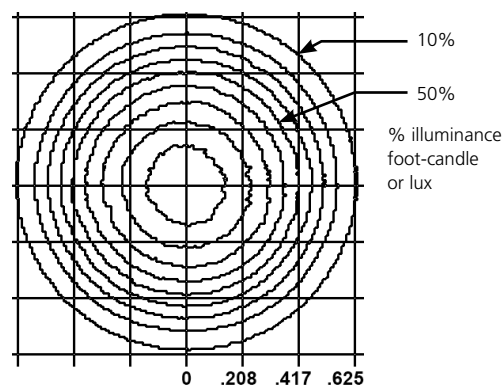
Metric conversions: For meters, multiply feet by 0.3048
For lux, multiply foot-candles by 10.76



Throw Distance (d)	10'	15'	20'	30'	106.2'
	3.0m	4.6m	6.1m	9.1m	32.4m
Field Diameter	13.6'	20.4'	27.2'	40.8'	—
	4.1m	6.2m	8.3m	12.4m	—
Illuminance (fc)	113	50	28	12.5	1.0
Illuminance (lux)	1,215	540	304	135	10.76

For field diameter at any distance, multiply distance by 1.359
For beam diameter at any distance, multiply by 0.965

Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

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