

LuxEOS 9 Inground VIVID COLOUR

LED INGROUND FLOOD FOR ARCHITECTURAL LIGHTING



LuxEOS 9 Inground RGBW (5700K)
10° 20° 40° 80° 10x60° 60x10°

Tested By
DW Windsor Group Laboratory
Hoddesdon
UK

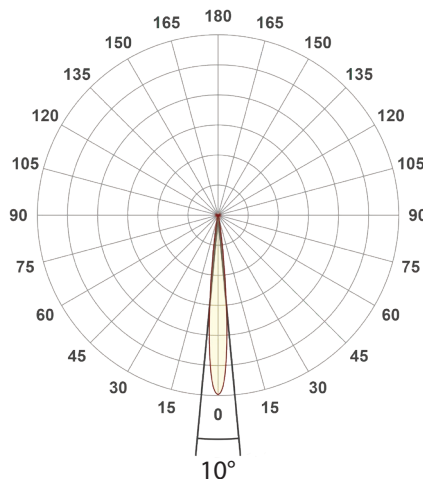
Date
Sept 2021

Dimensions
295mm (dia) x 77mm (D)

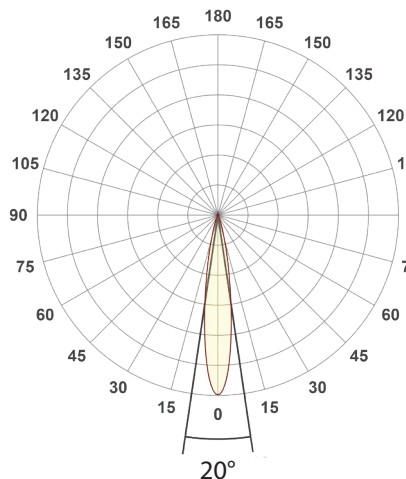
Weight
3.9 kgs (lbs)

Polar Distribution

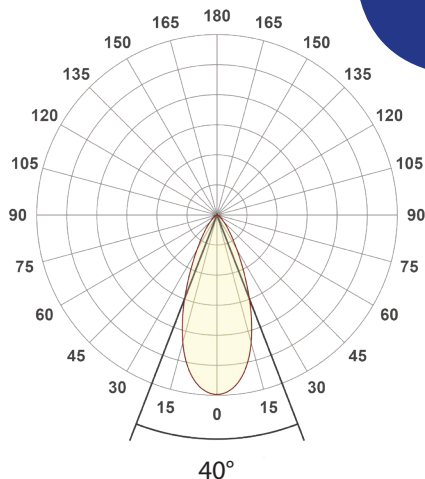
10° Conical Beam (Native)



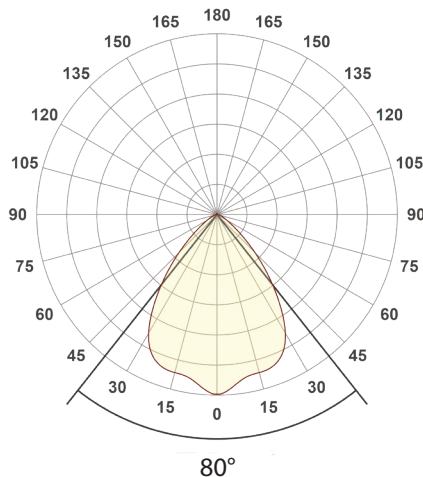
20° Conical Beam (With HBS)



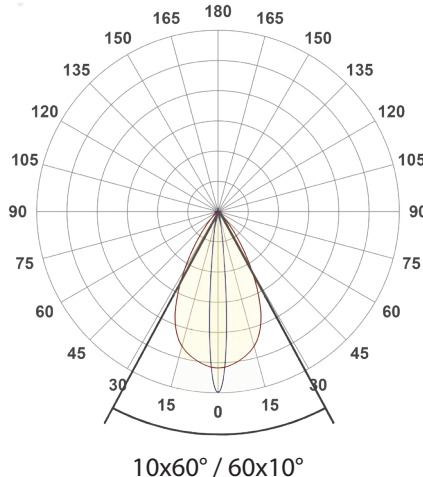
40° Conical Beam (With HBS)



80° Conical Beam (With HBS)

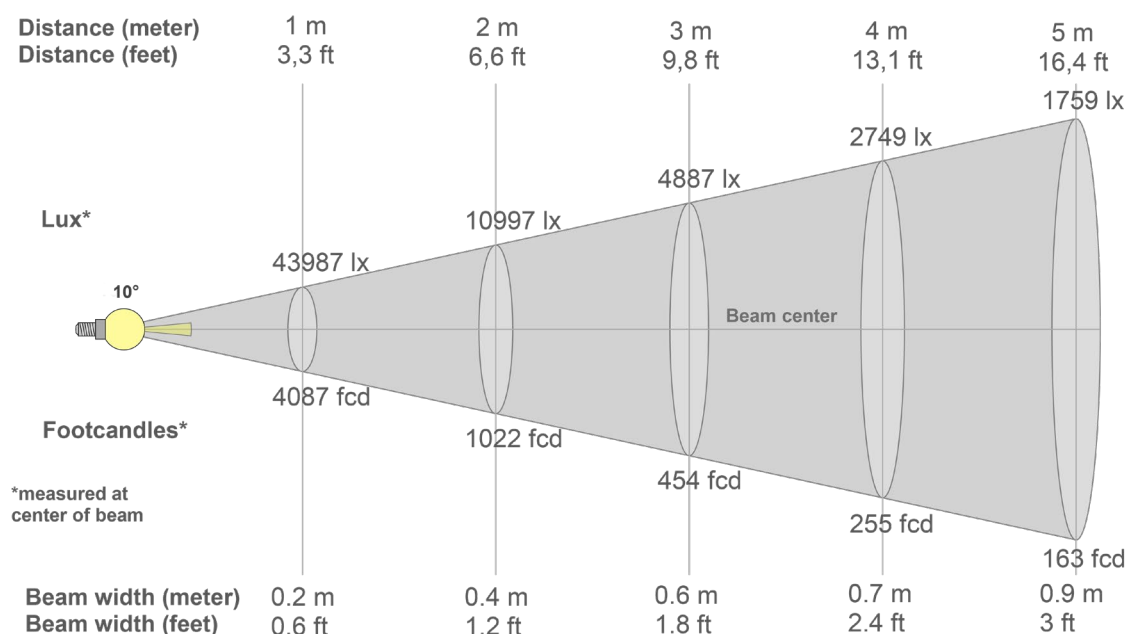


10x60° / 60x10° Elliptical Beam (With HBS)



LuxEOS 9 Inground - RGBW (5700K)

Intensities at Distance with native 10° Optics



Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
43987lx	10997lx	4887lx	2749lx	1759lx	1222lx	898lx	687lx	543lx	440lx	364lx	305lx	260lx	224lx	195lx	172lx	152lx	136lx	122lx	110lx
4086.6fc	1021.6fc	454.1fc	255.4fc	163.5fc	113.5fc	83.4fc	63.9fc	50.5fc	40.9fc	33.8fc	28.4fc	24.2fc	20.8fc	18.2fc	16fc	14.1fc	12.6fc	11.3fc	10.2fc

Intensities in 0° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
44.0K	43.2K	40.9K	36.6K	30.8K	24.1K	17.4K	11.8K	7.6K	4.9K	3.2K	2.3K	1.8K	1.6K	1.3K	1.1K	0.9K	0.7K	0.6K	0.5K
100%	98%	93%	83%	70%	55%	40%	27%	17%	11%	7%	5%	4%	4%	3%	3%	2%	2%	1%	1%

Intensities in 90° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
44.0K	43.2K	40.9K	36.6K	30.8K	24.1K	17.4K	11.8K	7.6K	4.9K	3.2K	2.3K	1.8K	1.6K	1.3K	1.1K	0.9K	0.7K	0.6K	0.5K
100%	98%	93%	83%	70%	55%	40%	27%	17%	11%	7%	5%	4%	4%	3%	3%	2%	2%	1%	1%

Intensities in 180° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
44.0K	43.2K	40.9K	36.6K	30.8K	24.1K	17.4K	11.8K	7.6K	4.9K	3.2K	2.3K	1.8K	1.6K	1.3K	1.1K	0.9K	0.7K	0.6K	0.5K
100%	98%	93%	83%	70%	55%	40%	27%	17%	11%	7%	5%	4%	4%	3%	3%	2%	2%	1%	1%

Intensities in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
44.0K	43.2K	40.9K	36.6K	30.8K	24.1K	17.4K	11.8K	7.6K	4.9K	3.2K	2.3K	1.8K	1.6K	1.3K	1.1K	0.9K	0.7K	0.6K	0.5K
100%	98%	93%	83%	70%	55%	40%	27%	17%	11%	7%	5%	4%	4%	3%	3%	2%	2%	1%	1%

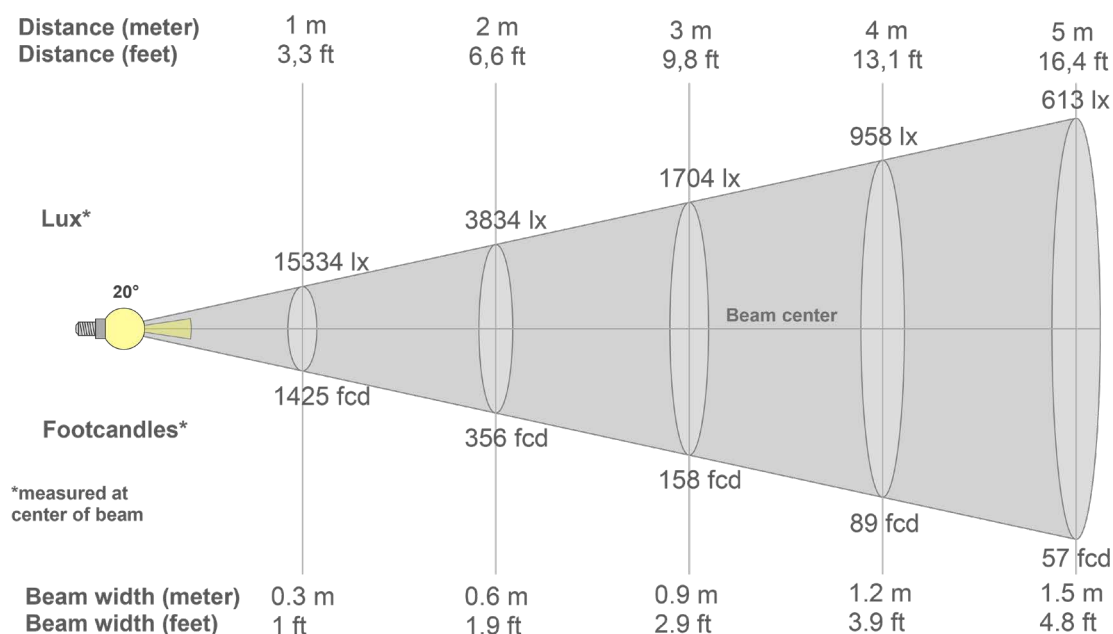
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
10.6°	18.4°	30°	98.8%	97.7%

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LuxEOS 9 Inground - RGBW (5700K)

Intensities at Distance with 20° Optics



Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
15334lx	3834lx	1704lx	958lx	613lx	426lx	313lx	240lx	189lx	153lx	127lx	106lx	91lx	78lx	68lx	60lx	53lx	47lx	42lx	38lx
1424.6fc	356.2fc	158.3fc	89fc	57fc	39.6fc	29.1fc	22.3fc	17.6fc	14.2fc	11.8fc	9.9fc	8.4fc	7.3fc	6.3fc	5.6fc	4.9fc	4.4fc	3.9fc	3.6fc

Intensities in 0° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
15.3K	15.2K	14.7K	14.0K	13.0K	11.9K	10.7K	9.4K	8.1K	6.9K	5.8K	4.8K	4.0K	3.2K	2.6K	2.1K	1.7K	1.4K	1.1K	0.9K
100%	99%	96%	91%	85%	78%	70%	61%	53%	45%	38%	32%	26%	21%	17%	14%	11%	9%	7%	6%

Intensities in 90° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
15.3K	15.2K	14.7K	14.0K	13.0K	11.9K	10.7K	9.4K	8.1K	6.9K	5.8K	4.8K	4.0K	3.2K	2.6K	2.1K	1.7K	1.4K	1.1K	0.9K
100%	99%	96%	91%	85%	78%	70%	61%	53%	45%	38%	32%	26%	21%	17%	14%	11%	9%	7%	6%

Intensities in 180° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
15.3K	15.2K	14.7K	14.0K	13.0K	11.9K	10.7K	9.4K	8.1K	6.9K	5.8K	4.8K	4.0K	3.2K	2.6K	2.1K	1.7K	1.4K	1.1K	0.9K
100%	99%	96%	91%	85%	78%	70%	61%	53%	45%	38%	32%	26%	21%	17%	14%	11%	9%	7%	6%

Intensities in 270° c-plane

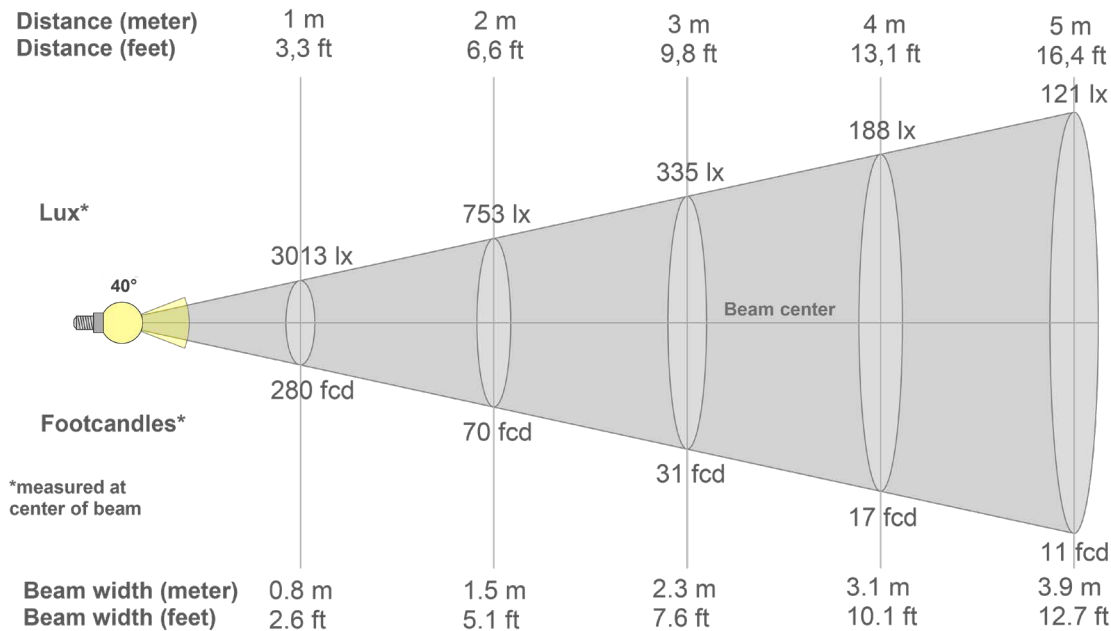
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
15.3K	15.2K	14.7K	14.0K	13.0K	11.9K	10.7K	9.4K	8.1K	6.9K	5.8K	4.8K	4.0K	3.2K	2.6K	2.1K	1.7K	1.4K	1.1K	0.9K
100%	99%	96%	91%	85%	78%	70%	61%	53%	45%	38%	32%	26%	21%	17%	14%	11%	9%	7%	6%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16.8°	33.1°	47.6°	97.0%	94.9%

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LuxEOS 9 Inground - RGBW (5700K) Intensities at Distance with 40° Optics



Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
3013lx	753lx	335lx	188lx	121lx	84lx	61lx	47lx	37lx	30lx	25lx	21lx	18lx	15lx	13lx	12lx	10lx	9lx	8lx	8lx
279.9fcd	70fcd	31.1fcd	17.5fcd	11.2fcd	7.8fcd	5.7fcd	4.4fcd	3.5fcd	2.8fcd	2.3fcd	1.9fcd	1.7fcd	1.4fcd	1.2fcd	1.1fcd	1fcd	0.9fcd	0.8fcd	0.7fcd

Intensities in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3013	3001	2960	2891	2793	2666	2508	2321	2110	1881	1643	1407	1184	983	811	668	550	454	375	310
100%	100%	98%	96%	93%	88%	83%	77%	70%	62%	55%	47%	39%	33%	27%	22%	18%	15%	12%	10%

Intensities in 90° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3013	3001	2960	2891	2793	2666	2508	2321	2110	1881	1643	1407	1184	983	811	668	550	454	375	310
100%	100%	98%	96%	93%	88%	83%	77%	70%	62%	55%	47%	39%	33%	27%	22%	18%	15%	12%	10%

Intensities in 180° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3013	3001	2960	2891	2793	2666	2508	2321	2110	1881	1643	1407	1184	983	811	668	550	454	375	310
100%	100%	98%	96%	93%	88%	83%	77%	70%	62%	55%	47%	39%	33%	27%	22%	18%	15%	12%	10%

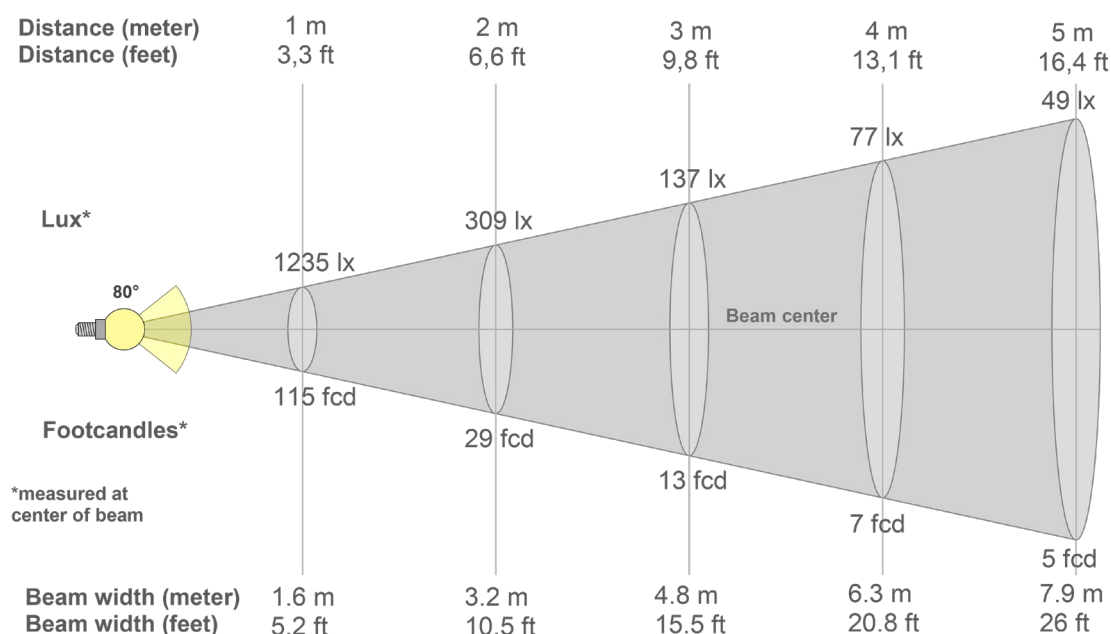
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3013	3001	2960	2891	2793	2666	2508	2321	2110	1881	1643	1407	1184	983	811	668	550	454	375	310
100%	100%	98%	96%	93%	88%	83%	77%	70%	62%	55%	47%	39%	33%	27%	22%	18%	15%	12%	10%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
42.3°	76.6°	105.5°	96.7%	90.9%

LuxEOS 9 Inground - RGBW (5700K)

Intensities at Distance with 80° Optics



Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
1235lx	309lx	137lx	77lx	49lx	34lx	25lx	19lx	15lx	12lx	10lx	9lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx	3lx
114.7fc	28.7fc	12.7fc	7.2fc	4.6fc	3.2fc	2.3fc	1.8fc	1.4fc	1.1fc	0.9fc	0.8fc	0.7fc	0.6fc	0.5fc	0.4fc	0.4fc	0.4fc	0.3fc	0.3fc

Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1235	1194	1138	1126	1114	1061	942	756	554	370	223	129	77	49	32	19	10	3	1	0
100%	97%	92%	91%	90%	86%	76%	61%	45%	30%	18%	10%	6%	4%	3%	2%	1%	0%	0%	0%

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1235	1194	1138	1126	1114	1061	942	756	554	370	223	129	77	49	32	19	10	3	1	0
100%	97%	92%	91%	90%	86%	76%	61%	45%	30%	18%	10%	6%	4%	3%	2%	1%	0%	0%	0%

Intensities in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1235	1194	1138	1126	1114	1061	942	756	554	370	223	129	77	49	32	19	10	3	1	0
100%	97%	92%	91%	90%	86%	76%	61%	45%	30%	18%	10%	6%	4%	3%	2%	1%	0%	0%	0%

Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1235	1194	1138	1126	1114	1061	942	756	554	370	223	129	77	49	32	19	10	3	1	0
100%	97%	92%	91%	90%	86%	76%	61%	45%	30%	18%	10%	6%	4%	3%	2%	1%	0%	0%	0%

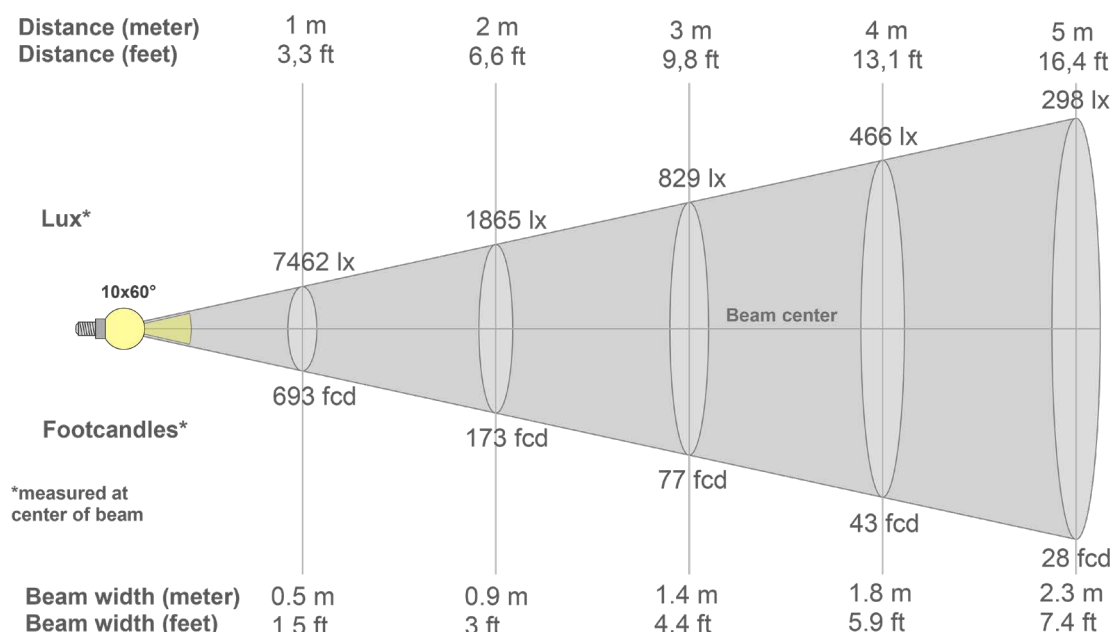
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
76.8°	110.8°	140.5°	95.0%	82.4%

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LuxEOS 9 Inground - RGBW (5700K)

Intensities at Distance with 10x60° & 60x10° Optics



Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
7462lx	1865lx	829lx	466lx	298lx	207lx	152lx	117lx	92lx	75lx	62lx	52lx	44lx	38lx	33lx	29lx	26lx	23lx	21lx	19lx
693.2fcd	173.3fcd	77fcd	43.3fcd	27.7fcd	19.3fcd	14.1fcd	10.8fcd	8.6fcd	6.9fcd	5.7fcd	4.8fcd	4.1fcd	3.5fcd	3.1fcd	2.7fcd	2.4fcd	2.1fcd	1.9fcd	1.7fcd

Intensities in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
7462	6998	6945	6862	6760	6644	6509	6346	6142	5878	5548	5142	4660	4121	3561	3003	2470	1980	1545	1178
100%	94%	93%	92%	91%	89%	87%	85%	82%	79%	74%	69%	62%	55%	48%	40%	33%	27%	21%	16%

Intensities in 90° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
7462	7379	5467	3289	1776	1043	708	504	354	253	189	147	118	95	79	68	58	51	45	39
100%	99%	73%	44%	24%	14%	9%	7%	5%	3%	3%	2%	2%	1%	1%	1%	1%	1%	1%	1%

Intensities in 180° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
7462	6998	6945	6862	6760	6644	6509	6346	6142	5878	5548	5142	4660	4121	3561	3003	2470	1980	1545	1178
100%	94%	93%	92%	91%	89%	87%	85%	82%	79%	74%	69%	62%	55%	48%	40%	33%	27%	21%	16%

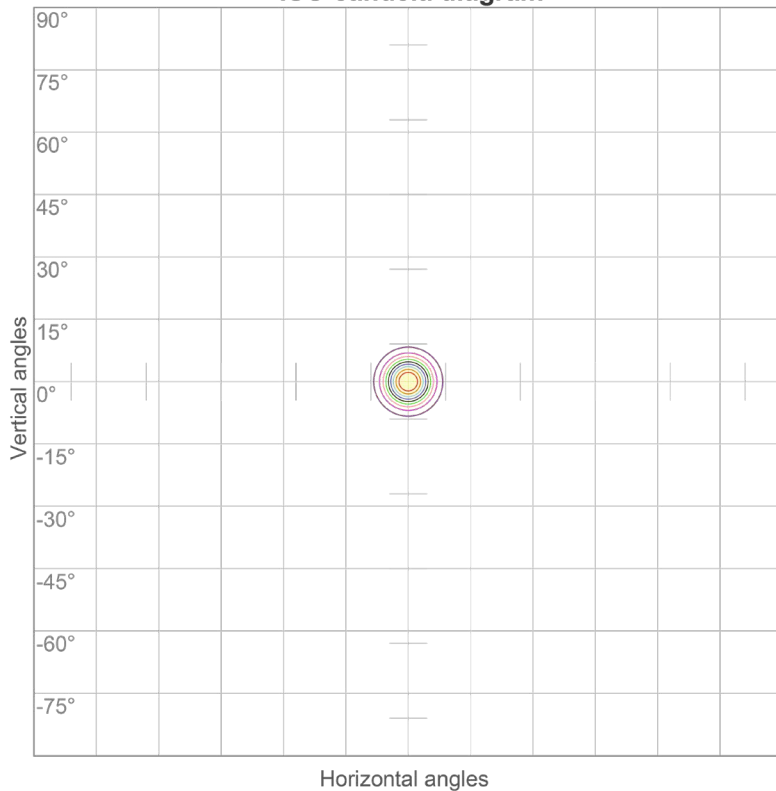
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
7462	7379	5467	3289	1776	1043	708	504	354	253	189	147	118	95	79	68	58	51	45	39
100%	99%	73%	44%	24%	14%	9%	7%	5%	3%	3%	2%	2%	1%	1%	1%	1%	1%	1%	1%

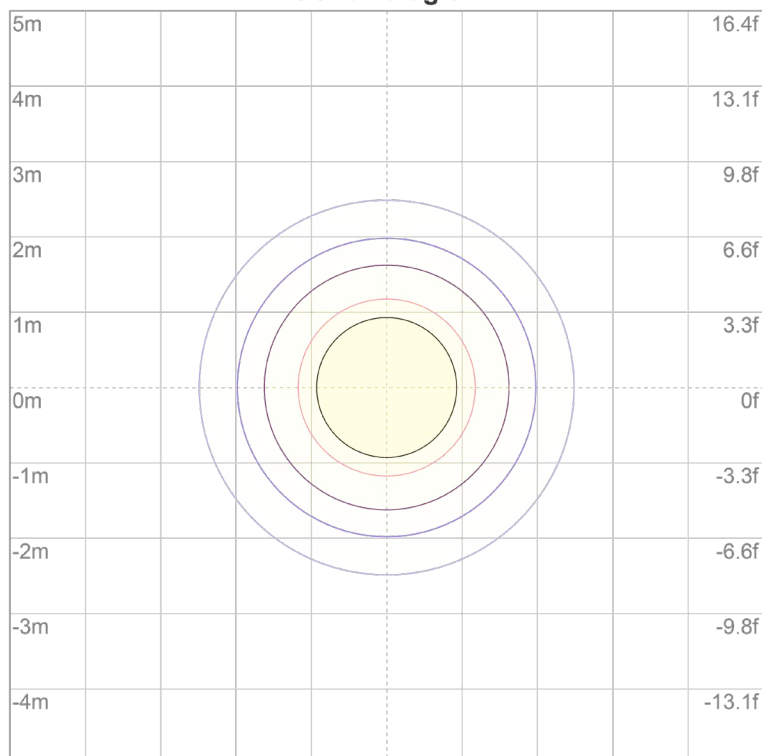
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
25.5°	45.7°	66.1°	97.5%	94.0%



ISO candela diagram

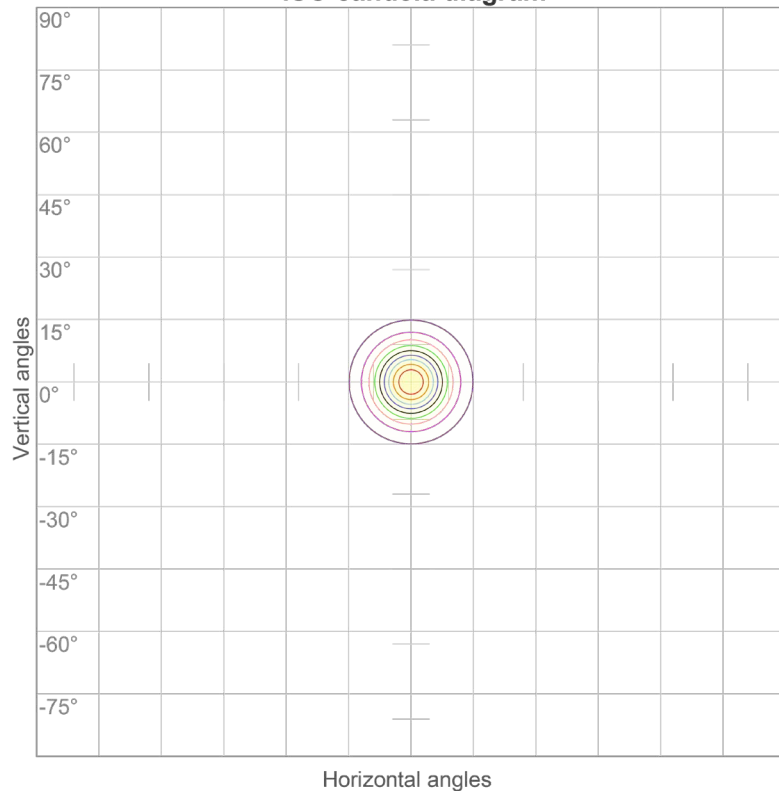


ISO lux diagram





ISO candela diagram



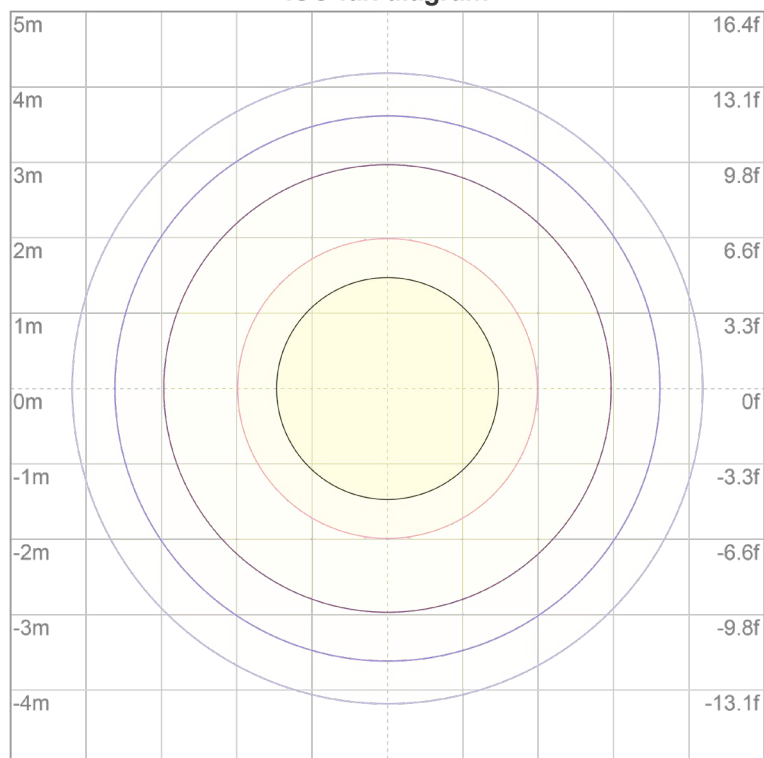
10%	1533 cd
20%	3067 cd
30%	4600 cd
40%	6134 cd
50%	7667 cd
60%	9201 cd
70%	10734 cd
80%	12268 cd
90%	13801 cd

Conditions:

Number of c-planes: 72

Candela at center: 15334 cd

ISO lux diagram



3%	4.60 lx
5%	7.67 lx
10%	15.3 lx
30%	46.0 lx
50%	76.7 lx

Conditions:

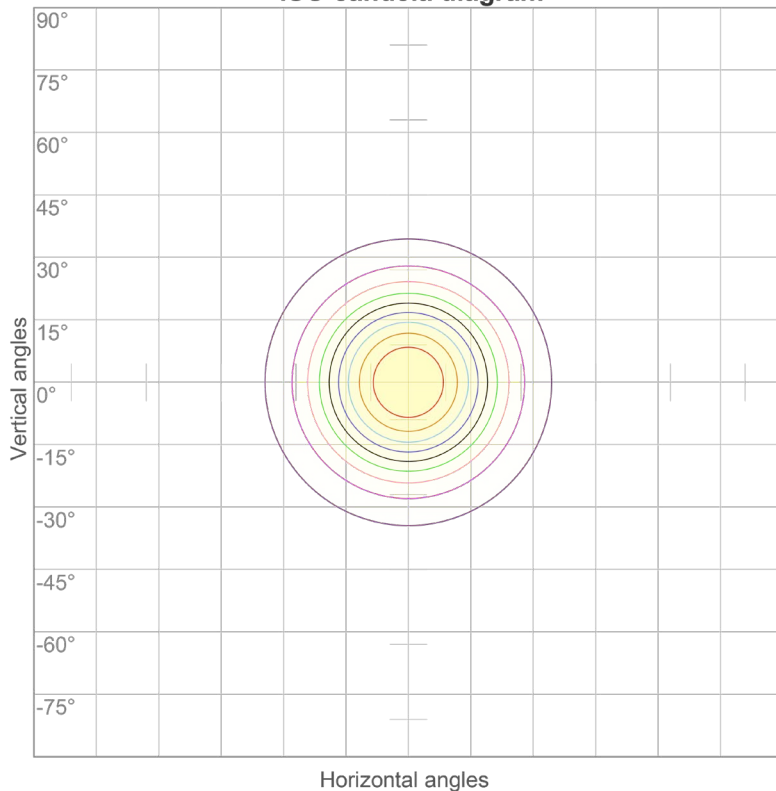
Number of c-planes: 72

Lux at center: 153 lx

*Lux distribution on a surface
when lamp is mounted at 10
meters from the surface.*



ISO candela diagram



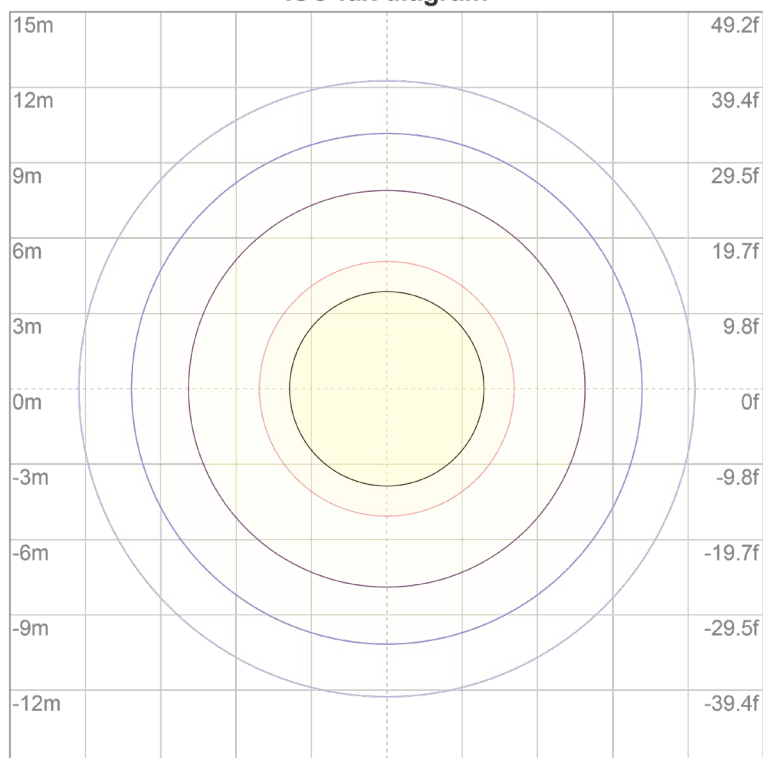
10%	301 cd
20%	603 cd
30%	904 cd
40%	1205 cd
50%	1507 cd
60%	1808 cd
70%	2109 cd
80%	2410 cd
90%	2712 cd

Conditions:

Number of c-planes: 72

Candela at center: 3013 cd

ISO lux diagram



3%	0.904 lx
5%	1.51 lx
10%	3.01 lx
30%	9.04 lx
50%	15.1 lx

Conditions:

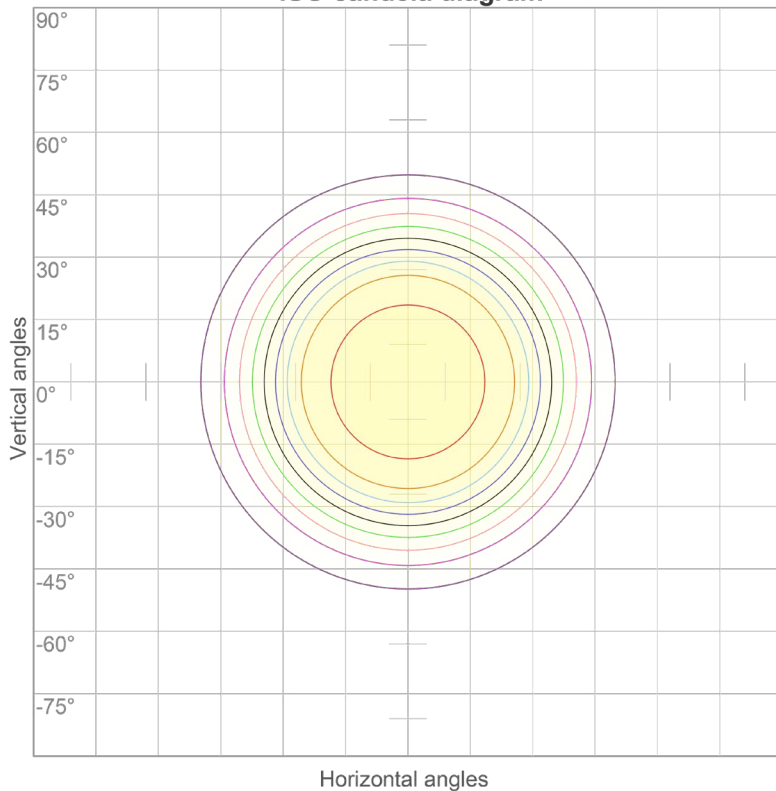
Number of c-planes: 72

Lux at center: 30.1 lx

*Lux distribution on a surface
when lamp is mounted at 10
meters from the surface.*



ISO candela diagram



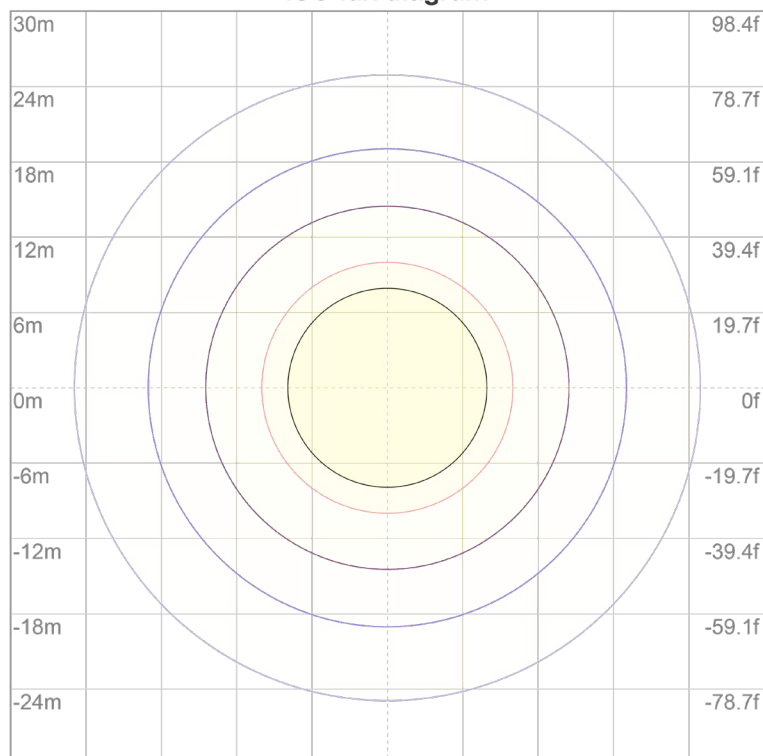
10%	124 cd
20%	247 cd
30%	371 cd
40%	494 cd
50%	618 cd
60%	741 cd
70%	865 cd
80%	988 cd
90%	1112 cd

Conditions:

Number of c-planes: 72

Candela at center: 1235 cd

ISO lux diagram



3%	0.371 lx
5%	0.618 lx
10%	1.24 lx
30%	3.71 lx
50%	6.18 lx

Conditions:

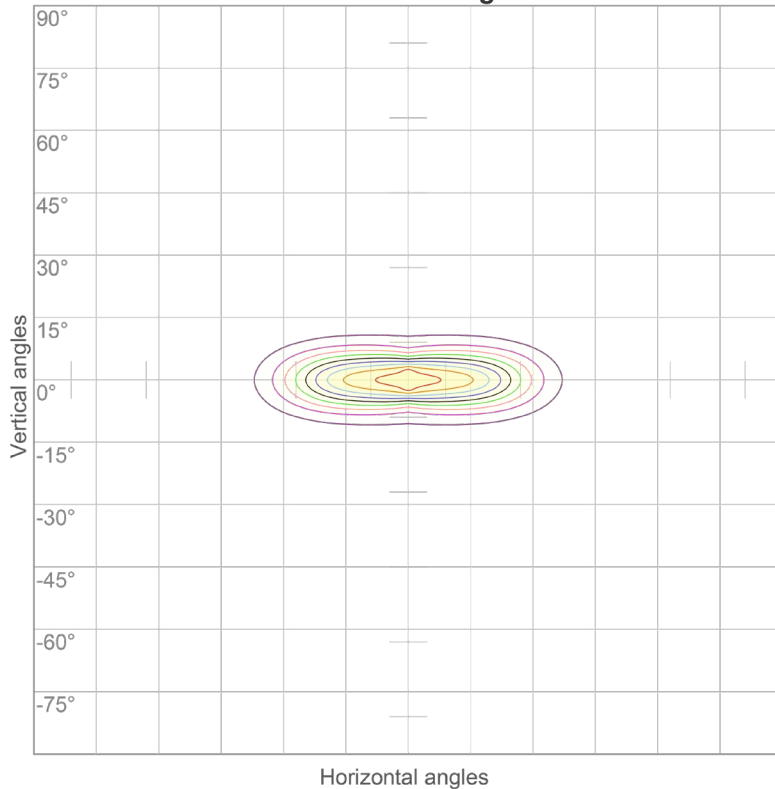
Number of c-planes: 72

Lux at center: 12.4 lx

*Lux distribution on a surface
when lamp is mounted at 10
meters from the surface.*



ISO candela diagram



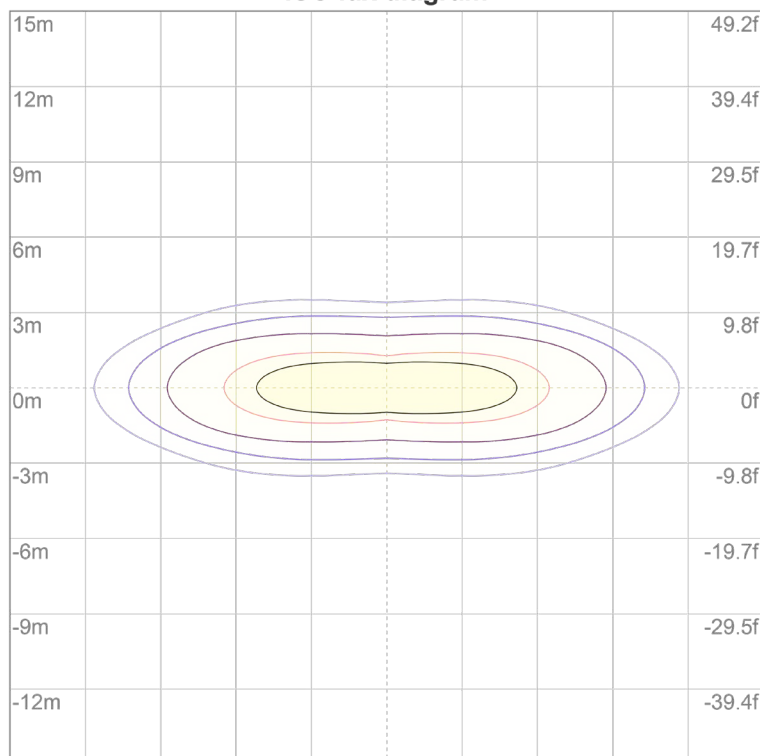
10%	746 cd
20%	1492 cd
30%	2239 cd
40%	2985 cd
50%	3731 cd
60%	4477 cd
70%	5223 cd
80%	5970 cd
90%	6716 cd

Conditions:

Number of c-planes: 72

Candela at center: 7462 cd

ISO lux diagram



3%	2.24 lx
5%	3.73 lx
10%	7.46 lx
30%	22.4 lx
50%	37.3 lx

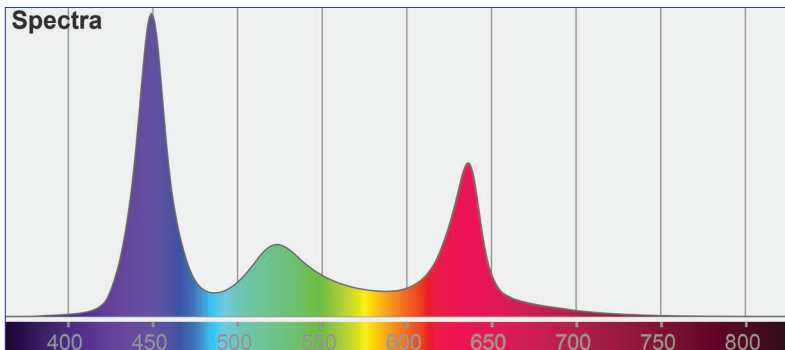
Conditions:

Number of c-planes: 72

Lux at center: 74.6 lx

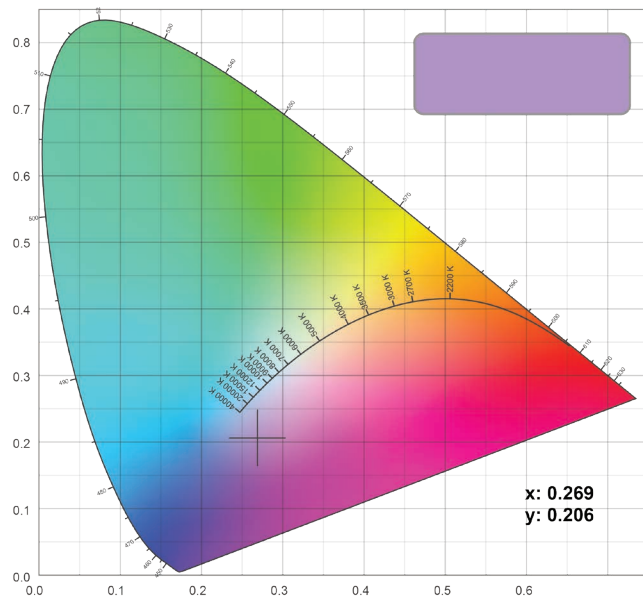
*Lux distribution on a surface
when lamp is mounted at 10
meters from the surface.*

LuxEOS 9 Inground - RGBW (5700K) Colormetrics RGBW

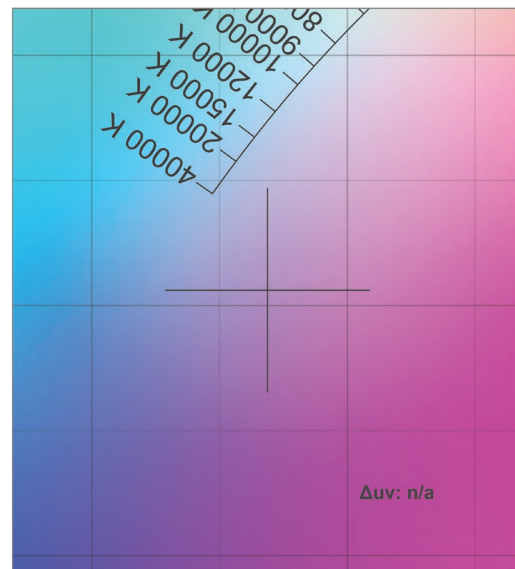


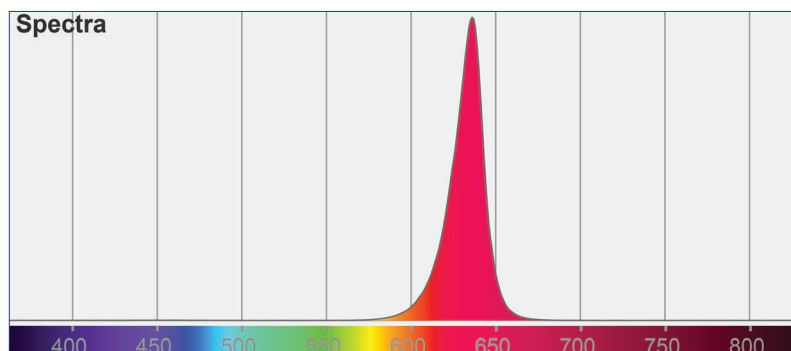
Total Lumen Output (Native) : 1998 lm
Efficacy : 39.96 lm/W
Voltage : 240V
Supply Power : 50W
Supply Power Factor : 0.97

CIE 1931



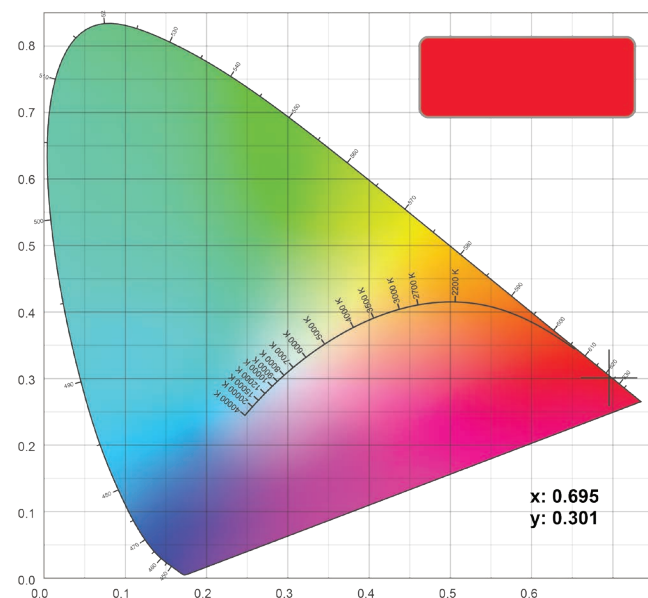
CIE 1931 Zoom





Red Lumen Output : 441 lm

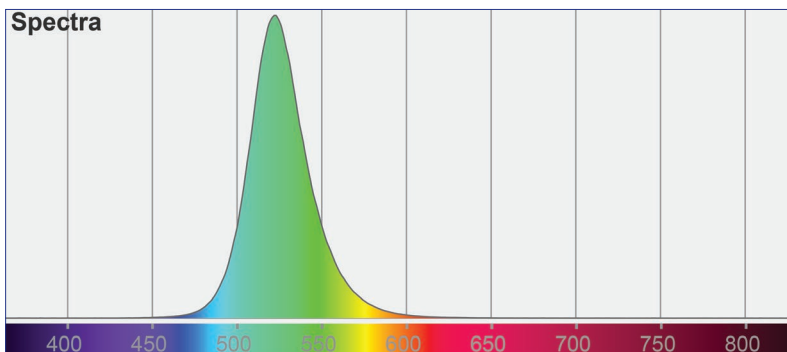
CIE 1931



CIE 1931 Zoom

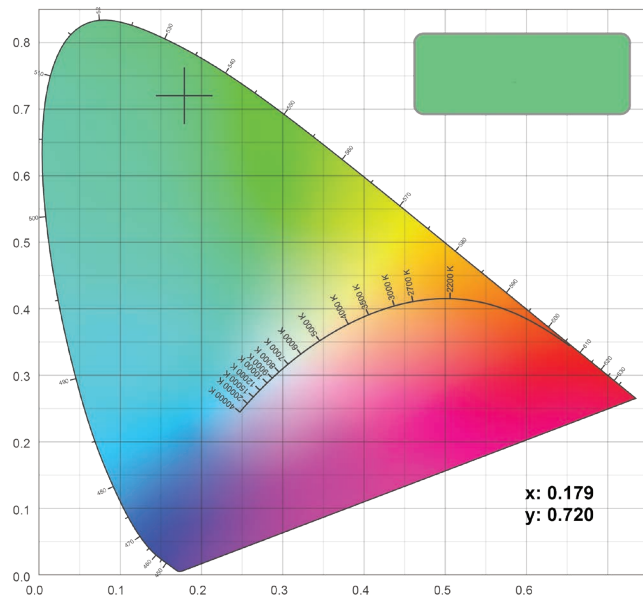


LuxEOS 9 Inground - RGBW (5700K) Colormetrics **GREEN**

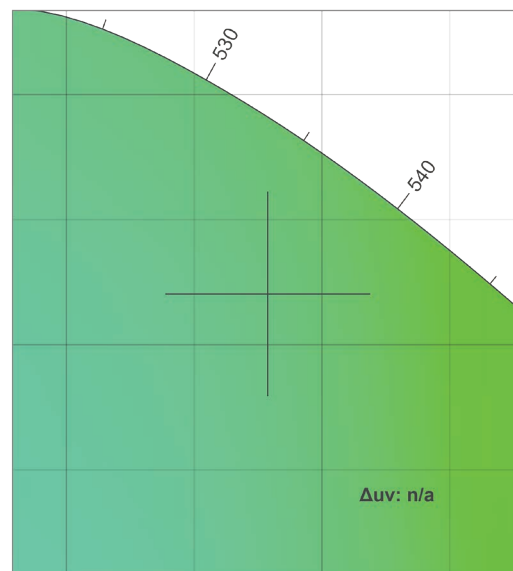


Green Lumen Output : 677 lm

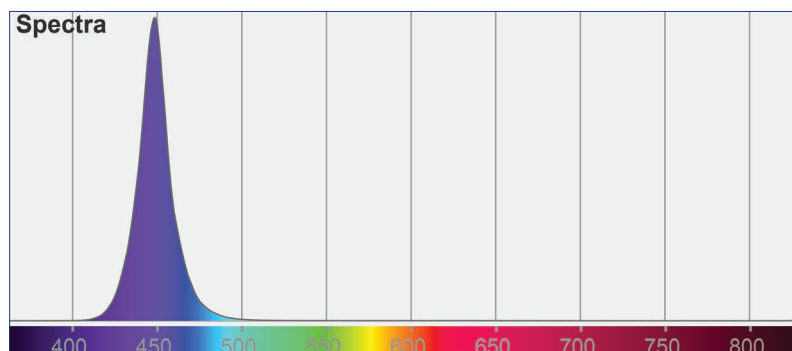
CIE 1931



CIE 1931 Zoom

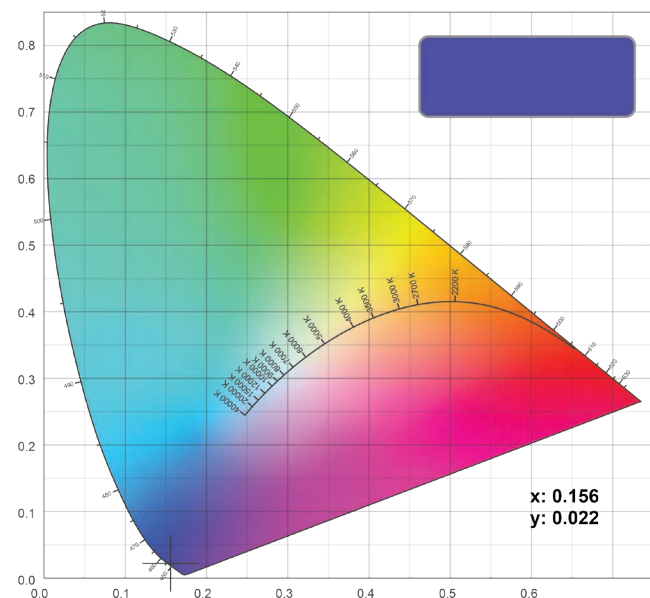


LuxEOS 9 Inground - RGBW (5700K) Colormetrics **BLUE**

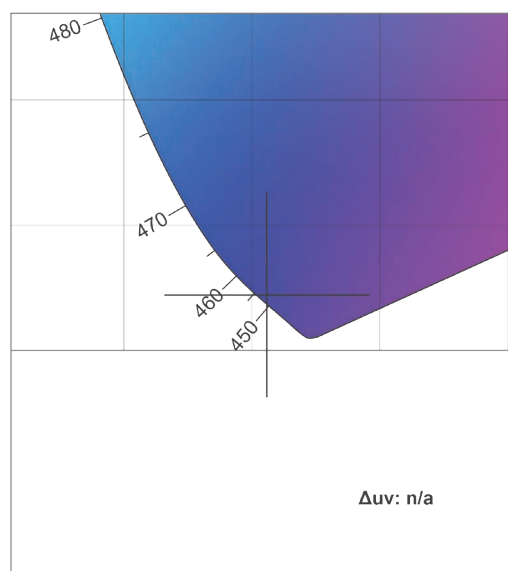


Blue Lumen Output : 149 lm

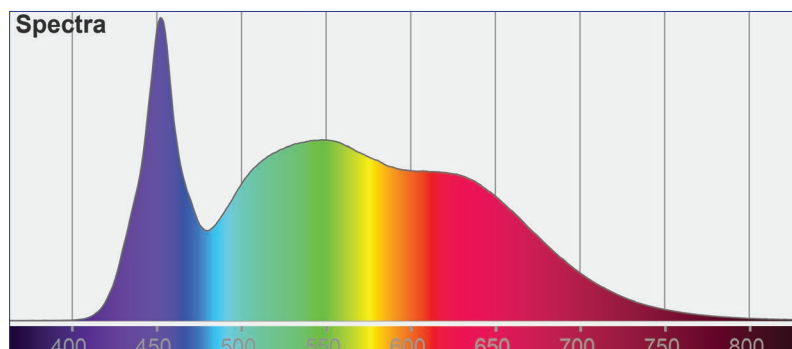
CIE 1931



CIE 1931 Zoom

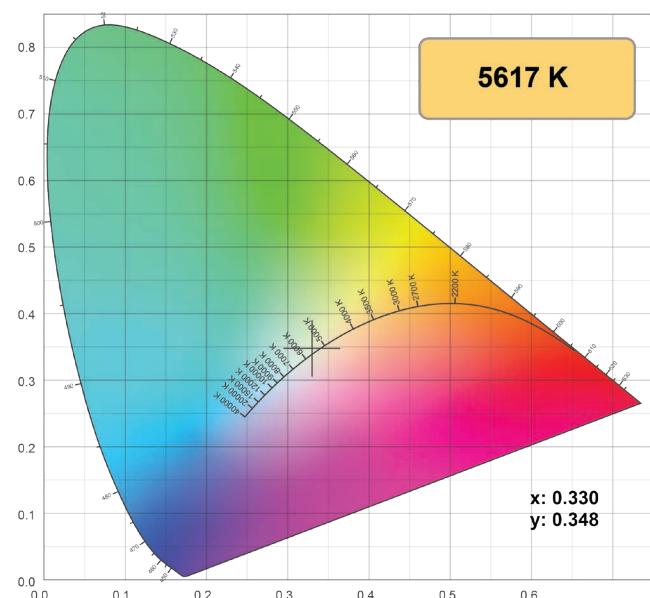


LuxEOS 9 Inground - RGBW (5700K) Colormetrics **WHITE 5700K**

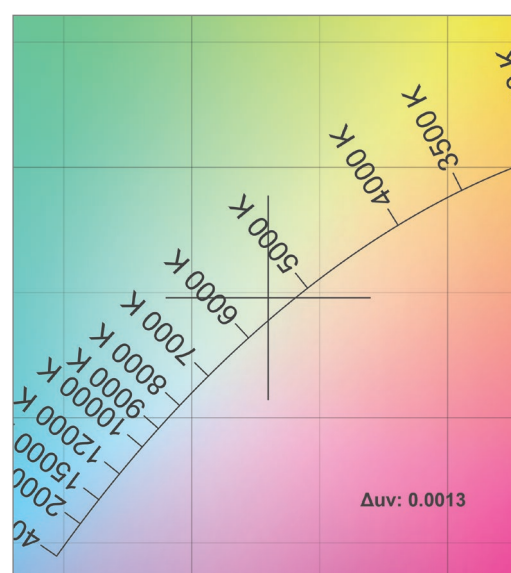


White 5700K Lumen Output : 1213 lm
CRI: 90

CIE 1931



CIE 1931 Zoom



Should further photometric variations be required, please contact our Head Office.

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