

LuxEOS 9 Inground VIVID COLOUR

LED INGROUND FLOOD FOR ARCHITECTURAL LIGHTING



LuxEOS 9 Inground RGBW (1700K)
10° 20° 40° 80° 10x60° 60x10°

Tested By
DW Windsor Group Laboratory
Hoddesdon
UK

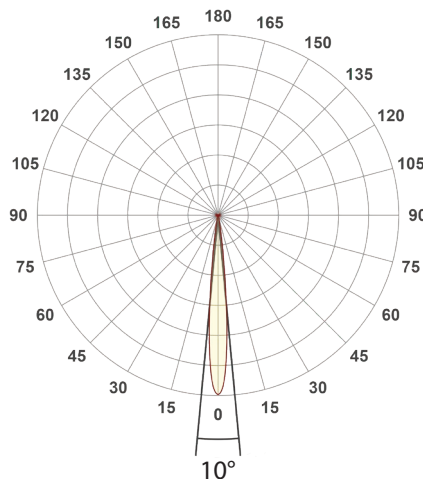
Date
Sept 2021

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

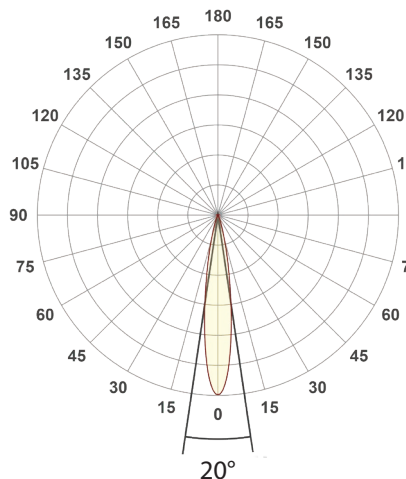
Weight
3.9 kgs (lbs)

Polar Distribution

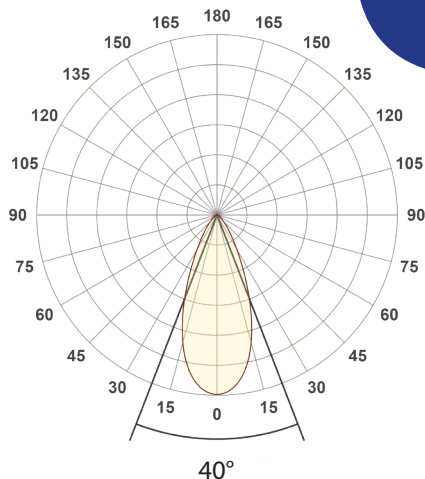
10° Conical Beam (Native)



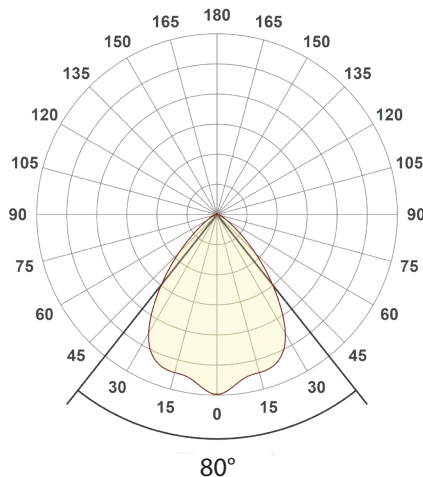
20° Conical Beam (With HBS)



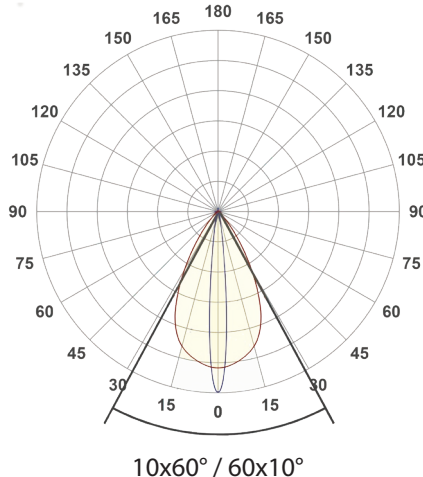
40° Conical Beam (With HBS)



80° Conical Beam (With HBS)

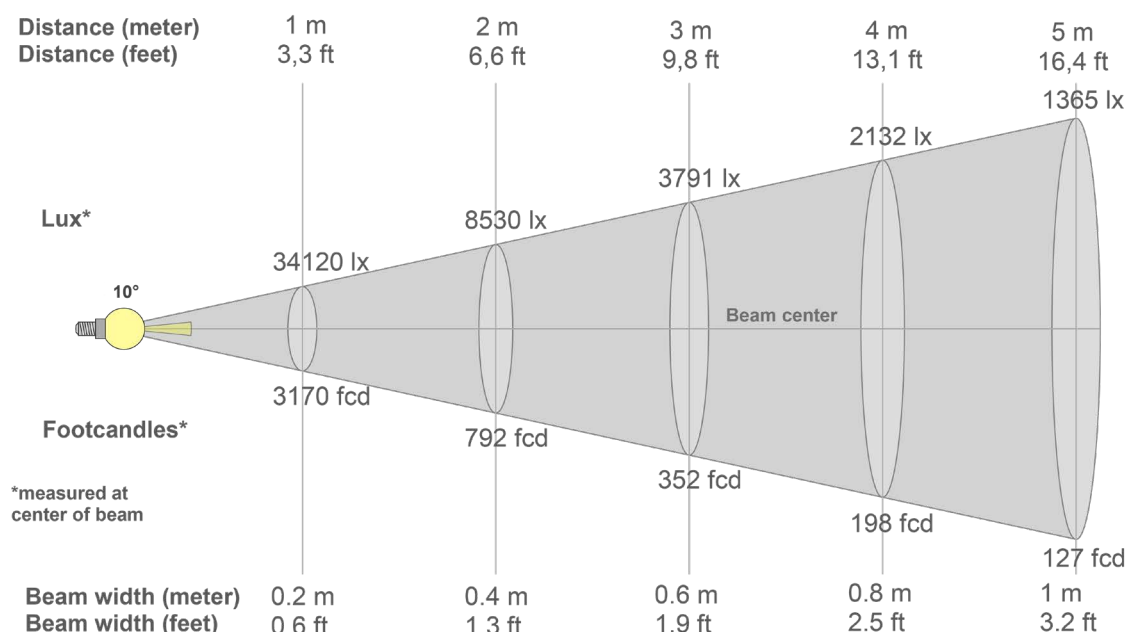


10x60° / 60x10° Elliptical Beam (With HBS)



LuxEOS 9 Inground - RGBA (1700K)

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
34120lx	8530lx	3791lx	2132lx	1365lx	948lx	696lx	533lx	421lx	341lx	282lx	237lx	202lx	174lx	152lx	133lx	118lx	105lx	95lx	85lx
3169.8fc	792.5fc	352.2fc	198.1fc	126.8fc	88.1fc	64.7fc	49.5fc	39.1fc	31.7fc	26.2fc	22fc	18.8fc	16.2fc	14.1fc	12.4fc	11fc	9.8fc	8.8fc	7.9fc

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°
34.1K	33.6K	32.1K	29.4K	25.2K	19.9K	14.5K	9.8K	6.2K	3.9K	2.4K	1.7K	1.3K	1.1K	0.9K	0.8K	0.7K	0.6K	0.4K	0.4K
100%	99%	94%	86%	74%	58%	43%	29%	18%	11%	7%	5%	4%	3%	3%	2%	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°
34.1K	33.6K	32.1K	29.4K	25.2K	19.9K	14.5K	9.8K	6.2K	3.9K	2.4K	1.7K	1.3K	1.1K	0.9K	0.8K	0.7K	0.6K	0.4K	0.4K
100%	99%	94%	86%	74%	58%	43%	29%	18%	11%	7%	5%	4%	3%	3%	2%	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°
34.1K	33.6K	32.1K	29.4K	25.2K	19.9K	14.5K	9.8K	6.2K	3.9K	2.4K	1.7K	1.3K	1.1K	0.9K	0.8K	0.7K	0.6K	0.4K	0.4K
100%	99%	94%	86%	74%	58%	43%	29%	18%	11%	7%	5%	4%	3%	3%	2%	2%	2%	1%	1%

Intensities in 270° c-plane

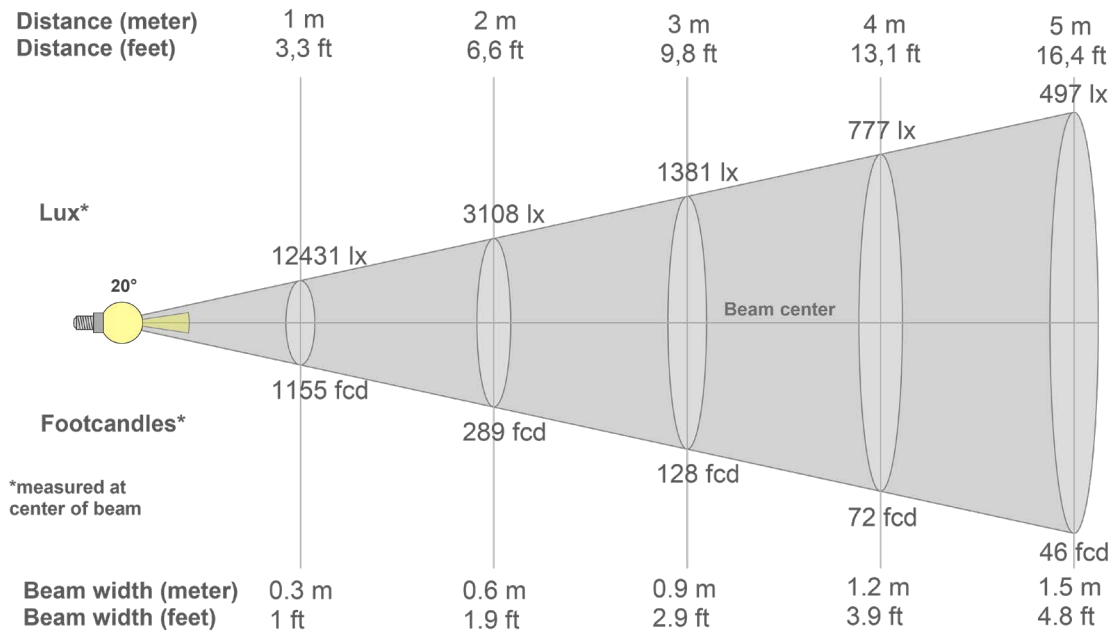
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
34.1K	33.6K	32.1K	29.4K	25.2K	19.9K	14.5K	9.8K	6.2K	3.9K	2.4K	1.7K	1.3K	1.1K	0.9K	0.8K	0.7K	0.6K	0.4K	0.4K
100%	99%	94%	86%	74%	58%	43%	29%	18%	11%	7%	5%	4%	3%	3%	2%	2%	2%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
11°	18.5°	29.3°	97.3%	95.9%

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LuxEOS 9 Inground - RGBA (1700K) 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
12431lx	3108lx	1381lx	777lx	497lx	345lx	254lx	194lx	153lx	124lx	103lx	86lx	74lx	63lx	55lx	49lx	43lx	38lx	34lx	31lx
1154.8fc	288.7fc	128.3fc	72.2fc	46.2fc	32.1fc	23.6fc	18fc	14.3fc	11.5fc	9.5fc	8fc	6.8fc	5.9fc	5.1fc	4.5fc	4fc	3.6fc	3.2fc	2.9fc

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°
12.4K	12.3K	12.0K	11.4K	10.6K	9.7K	8.6K	7.6K	6.6K	5.6K	4.7K	3.9K	3.2K	2.6K	2.1K	1.7K	1.4K	1.1K	0.9K	0.7K
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°
12.4K	12.3K	12.0K	11.4K	10.6K	9.7K	8.6K	7.6K	6.6K	5.6K	4.7K	3.9K	3.2K	2.6K	2.1K	1.7K	1.4K	1.1K	0.9K	0.7K
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°
12.4K	12.3K	12.0K	11.4K	10.6K	9.7K	8.6K	7.6K	6.6K	5.6K	4.7K	3.9K	3.2K	2.6K	2.1K	1.7K	1.4K	1.1K	0.9K	0.7K
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°
12.4K	12.3K	12.0K	11.4K	10.6K	9.7K	8.6K	7.6K	6.6K	5.6K	4.7K	3.9K	3.2K	2.6K	2.1K	1.7K	1.4K	1.1K	0.9K	0.7K
100%	99%	96%	91%	85%	78%	70%	61%	53%	45%	38%	32%	26%	21%	17%	14%	11%	9%	7%	6%

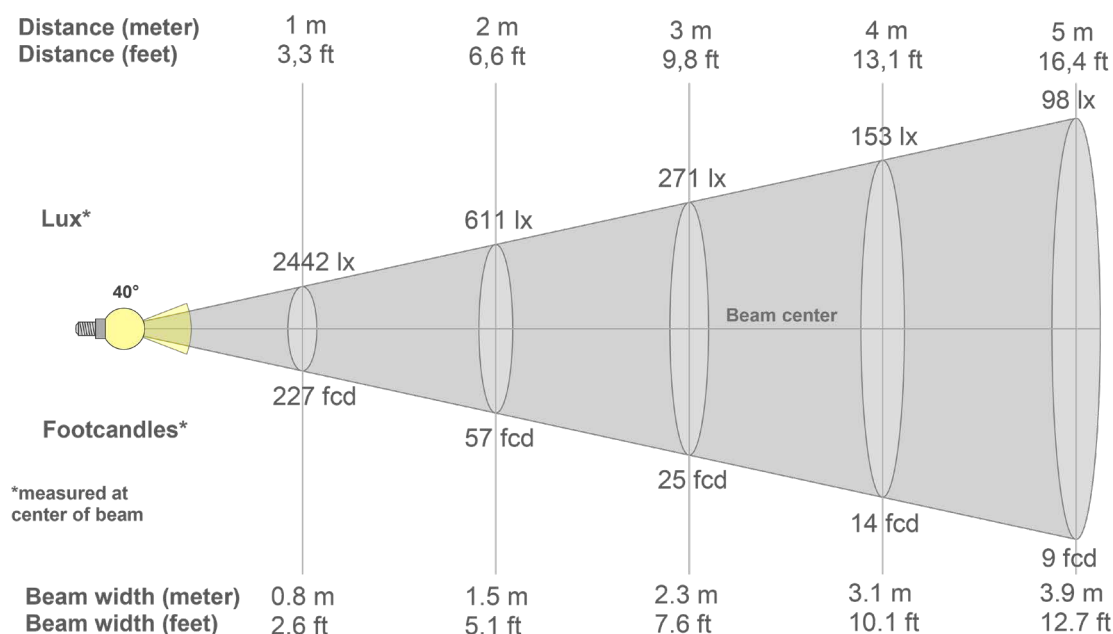
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16.8°	33.1°	47.6°	97.0%	94.9%

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LuxEOS 9 Inground - RGBA (1700K)

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
2442lx	611lx	271lx	153lx	98lx	68lx	50lx	38lx	30lx	24lx	20lx	17lx	14lx	12lx	11lx	10lx	8lx	8lx	7lx	6lx
226.9fcd	56.7fcd	25.2fcd	14.2fcd	9.1fcd	6.3fcd	4.6fcd	3.5fcd	2.8fcd	2.3fcd	1.9fcd	1.6fcd	1.3fcd	1.2fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.6fcd

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°
2442	2432	2399	2343	2264	2160	2033	1881	1710	1525	1331	1140	959	797	657	541	446	368	304	252
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°
2442	2432	2399	2343	2264	2160	2033	1881	1710	1525	1331	1140	959	797	657	541	446	368	304	252
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°
2442	2432	2399	2343	2264	2160	2033	1881	1710	1525	1331	1140	959	797	657	541	446	368	304	252
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°
2442	2432	2399	2343	2264	2160	2033	1881	1710	1525	1331	1140	959	797	657	541	446	368	304	252
100%	100%	98%	96%	93%	88%	83%	77%	70%	62%	55%	47%	39%	33%	27%	22%	18%	15%	12%	10%

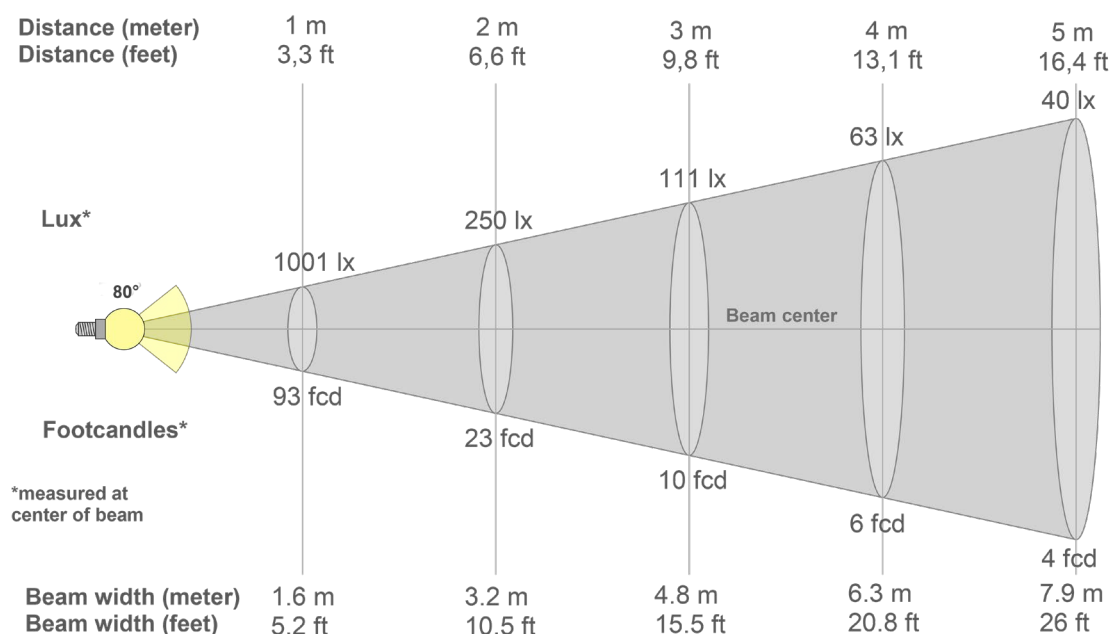
Beam angle 50%	Field angle 10%	Cutoff angle 2.5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
42.3°	76.6°	105.5°	96.7%	90.9%

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LuxEOS 9 Inground - RGBA (1700K)

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
1001lx	250lx	111lx	63lx	40lx	28lx	20lx	16lx	12lx	10lx	8lx	7lx	6lx	5lx	4lx	4lx	3lx	3lx	3lx	3lx
93fcd	23.3fcd	10.3fcd	5.8fcd	3.7fcd	2.6fcd	1.9fcd	1.5fcd	1.1fcd	0.9fcd	0.8fcd	0.6fcd	0.6fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd	0.3fcd	0.3fcd	0.2fcd

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°
1001	968	923	913	903	860	764	613	449	300	181	104	62	40	26	16	8	2	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°
1001	968	923	913	903	860	764	613	449	300	181	104	62	40	26	16	8	2	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°
1001	968	923	913	903	860	764	613	449	300	181	104	62	40	26	16	8	2	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°
1001	968	923	913	903	860	764	613	449	300	181	104	62	40	26	16	8	2	1	0
100%	97%	92%	91%	90%	86%	76%	61%	45%	30%	18%	10%	6%	4%	3%	2%	1%	0%	0%	0%

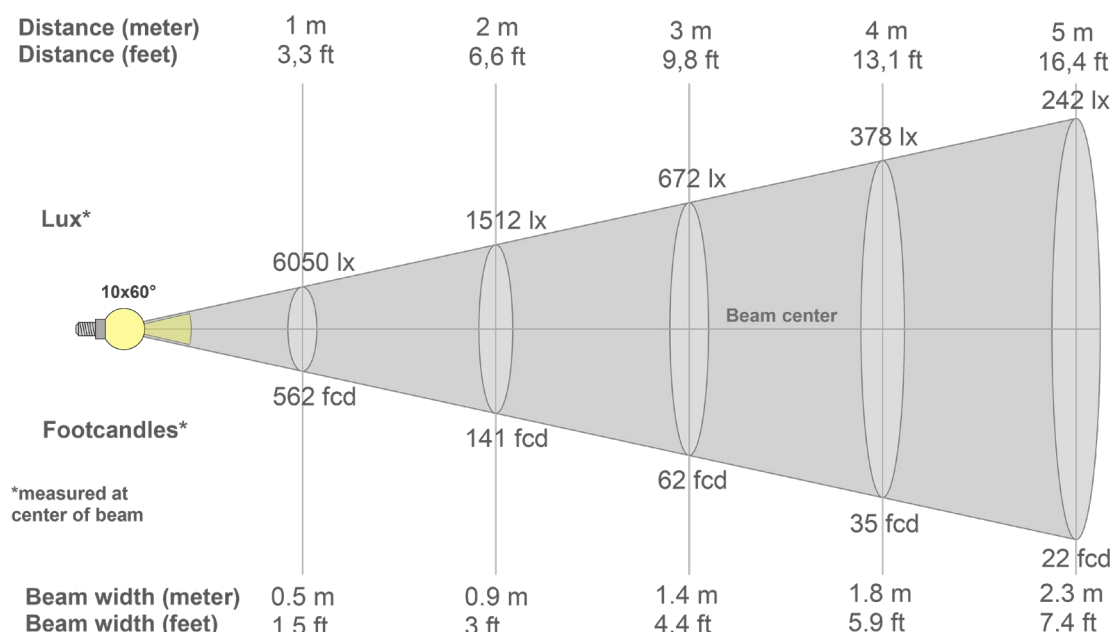
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
76.8°	110.8°	140.5°	95.0%	82.4%

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LuxEOS 9 Inground - RGBA (1700K)

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
6050lx	1512lx	672lx	378lx	242lx	168lx	123lx	95lx	75lx	60lx	50lx	42lx	36lx	31lx	27lx	24lx	21lx	19lx	17lx	15lx
562.1fc	140.5fc	62.5fc	35.1fc	22.5fc	15.6fc	11.5fc	8.8fc	6.9fc	5.6fc	4.6fc	3.9fc	3.3fc	2.9fc	2.5fc	2.2fc	1.9fc	1.7fc	1.6fc	1.4fc

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°
6050	5674	5631	5563	5481	5387	5277	5145	4980	4766	4498	4169	3778	3341	2887	2434	2003	1605	1253	955
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°
6050	5983	4432	2667	1440	846	574	408	287	205	153	119	96	77	64	55	47	41	36	32
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°
6050	5674	5631	5563	5481	5387	5277	5145	4980	4766	4498	4169	3778	3341	2887	2434	2003	1605	1253	955
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°
6050	5983	4432	2667	1440	846	574	408	287	205	153	119	96	77	64	55	47	41	36	32
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%

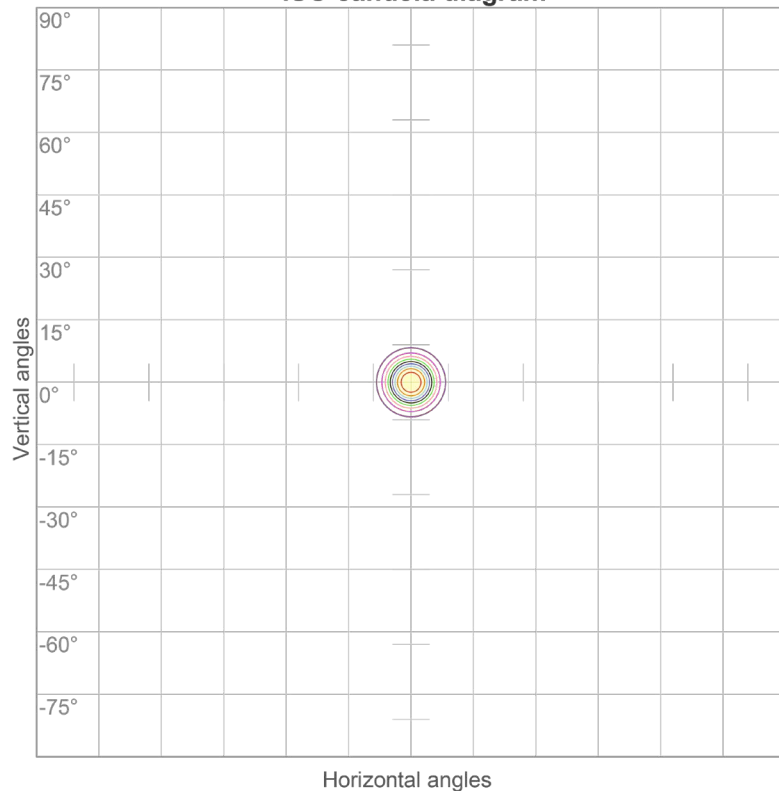
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LuxEOS 9 Inground - RGBA (1700K) ISO Candela & ISO Lux diagrams with 10° Optics



ISO candela diagram



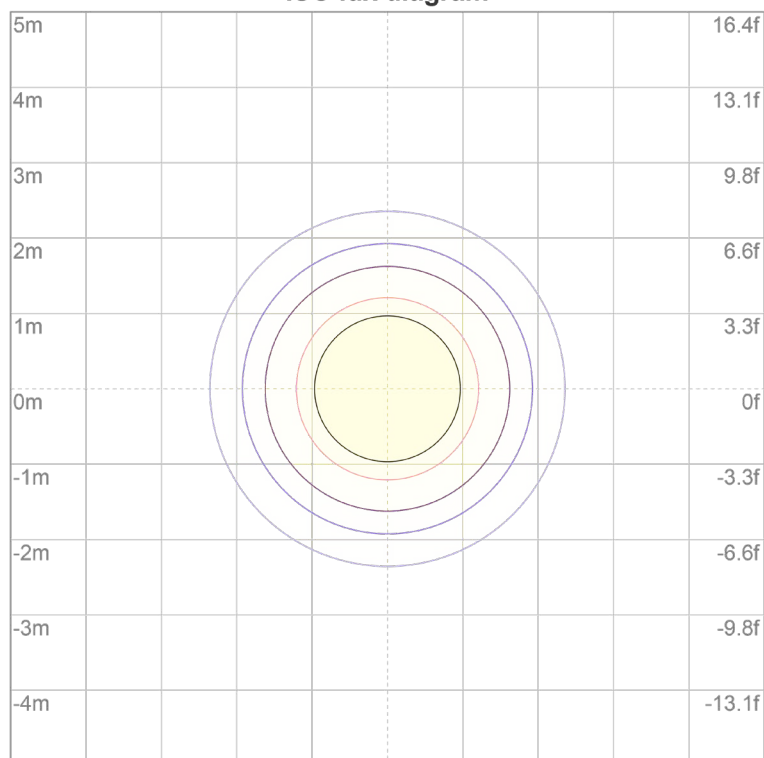
10%	3412 cd
20%	6824 cd
30%	10236 cd
40%	13648 cd
50%	17060 cd
60%	20472 cd
70%	23884 cd
80%	27296 cd
90%	30708 cd

Conditions:

Number of c-planes: 72

Candela at center: 34120 cd

ISO lux diagram



3%	10.2 lx
5%	17.1 lx
10%	34.1 lx
30%	102 lx
50%	171 lx

Conditions:

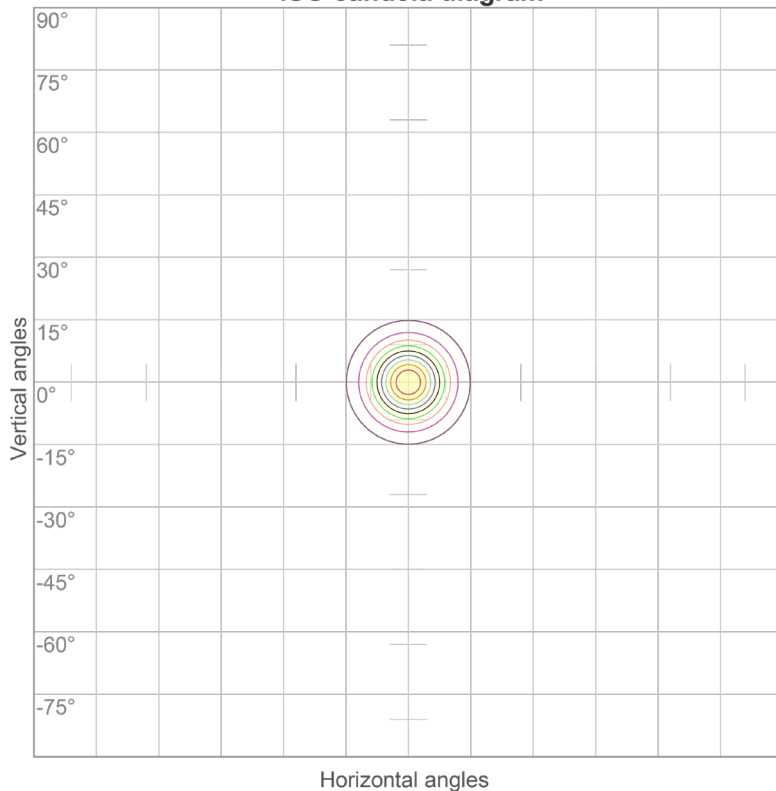
Number of c-planes: 72

Lux at center: 341 lx

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



ISO candela diagram



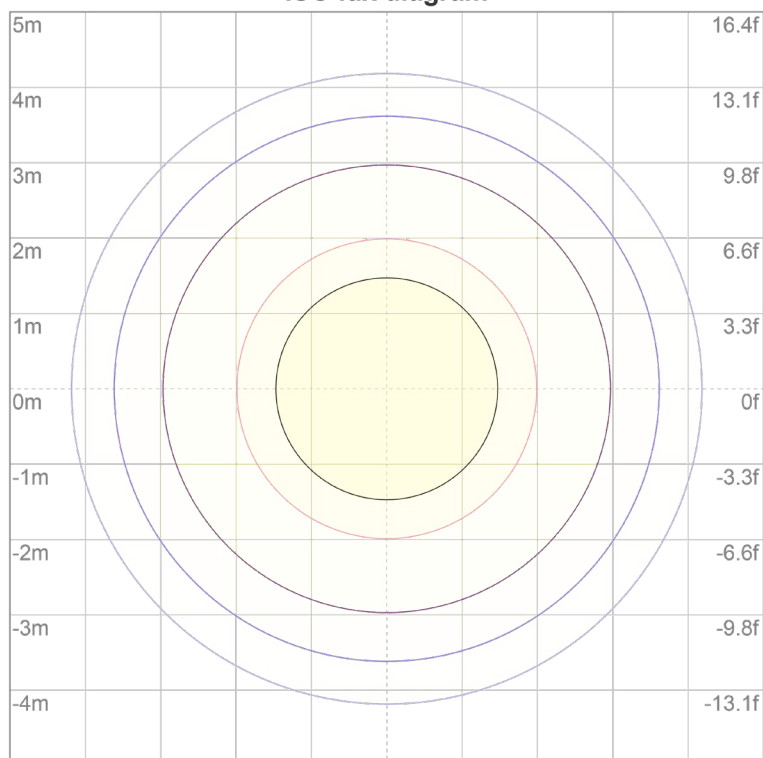
10%	1243 cd
20%	2486 cd
30%	3729 cd
40%	4972 cd
50%	6215 cd
60%	7458 cd
70%	8701 cd
80%	9945 cd
90%	11188 cd

Conditions:

Number of c-planes: 72

Candela at center: 12431 cd

ISO lux diagram



3%	3.73 lx
5%	6.22 lx
10%	12.4 lx
30%	37.3 lx
50%	62.2 lx

Conditions:

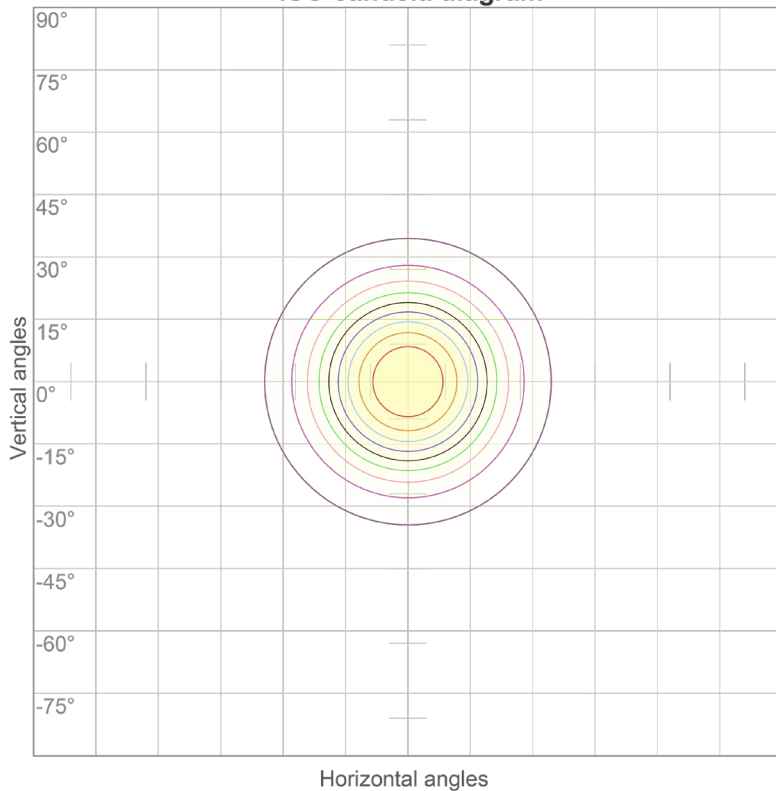
Number of c-planes: 72

Lux at center: 124 lx

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



ISO candela diagram



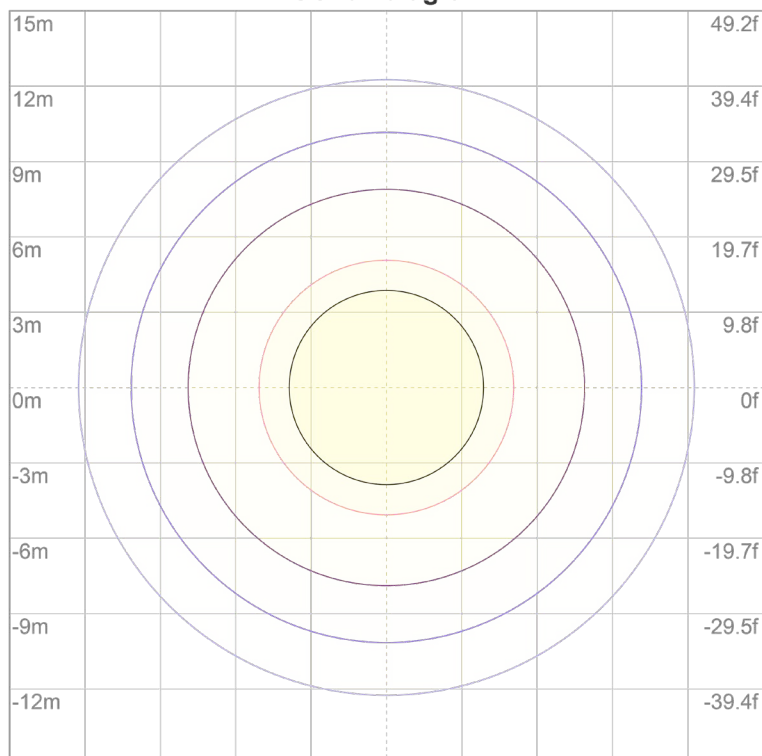
10%	244 cd
20%	488 cd
30%	733 cd
40%	977 cd
50%	1221 cd
60%	1465 cd
70%	1709 cd
80%	1954 cd
90%	2198 cd

Conditions:

Number of c-planes: 72

Candela at center: 2442 cd

ISO lux diagram



3%	0.733 lx
5%	1.22 lx
10%	2.44 lx
30%	7.33 lx
50%	12.2 lx

Conditions:

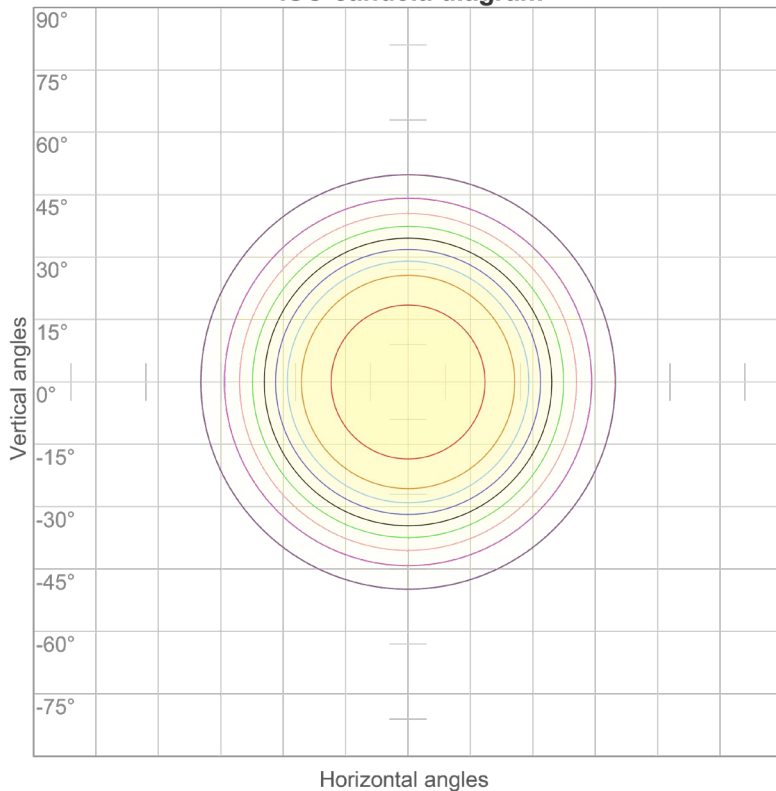
Number of c-planes: 72

Lux at center: 24.4 lx

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



ISO candela diagram



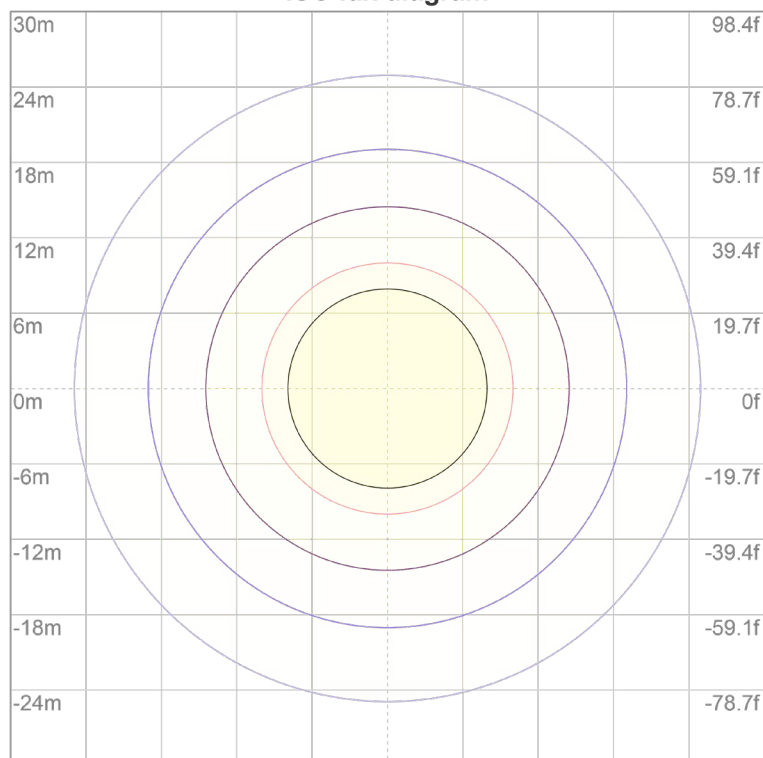
10%	100 cd
20%	200 cd
30%	300 cd
40%	401 cd
50%	501 cd
60%	601 cd
70%	701 cd
80%	801 cd
90%	901 cd

Conditions:

Number of c-planes: 72

Candela at center: 1001 cd

ISO lux diagram



3%	0.300 lx
5%	0.501 lx
10%	1.00 lx
30%	3.00 lx
50%	5.01 lx

Conditions:

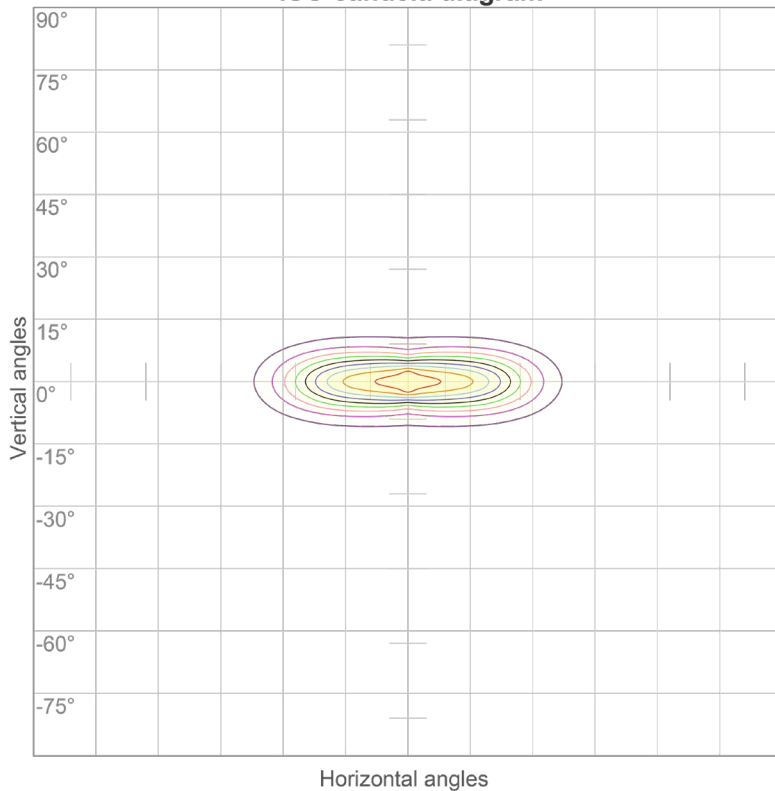
Number of c-planes: 72

Lux at center: 10.0 lx

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



ISO candela diagram



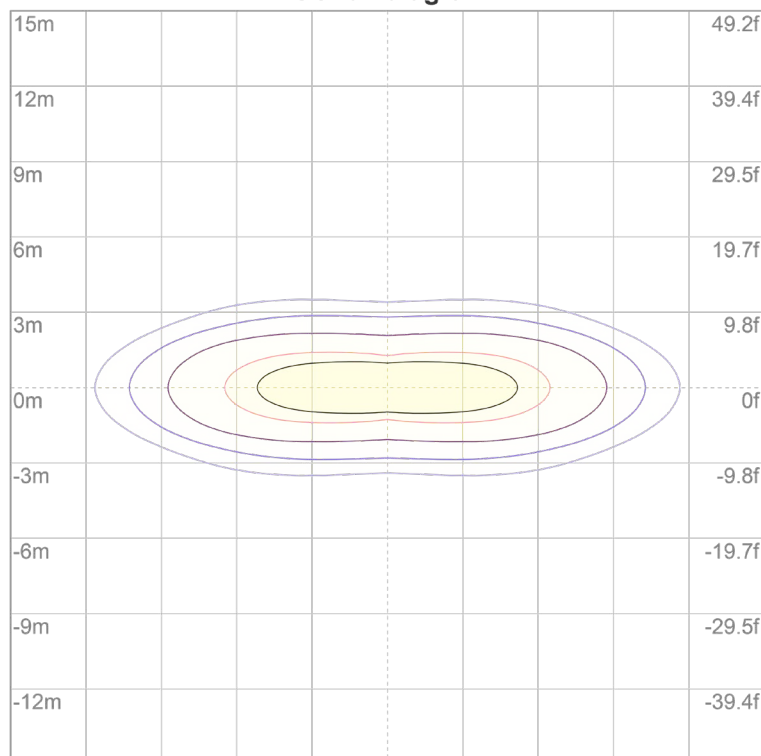
10%	605 cd
20%	1210 cd
30%	1815 cd
40%	2420 cd
50%	3025 cd
60%	3630 cd
70%	4235 cd
80%	4840 cd
90%	5445 cd

Conditions:

Number of c-planes: 72

Candela at center: 6050 cd

ISO lux diagram



3%	1.81 lx
5%	3.02 lx
10%	6.05 lx
30%	18.1 lx
50%	30.2 lx

Conditions:

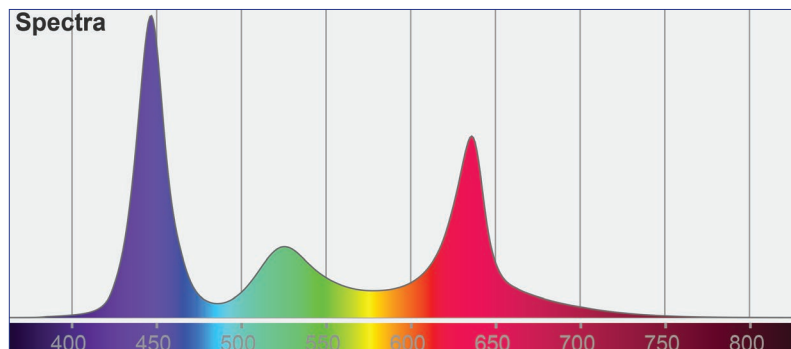
Number of c-planes: 72

Lux at center: 60.5 lx

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

LuxEOS 9 Inground - RGBA (1700K)

Colormetrics **RGBA**



Total Lumen Output (Native) : 1620 lm

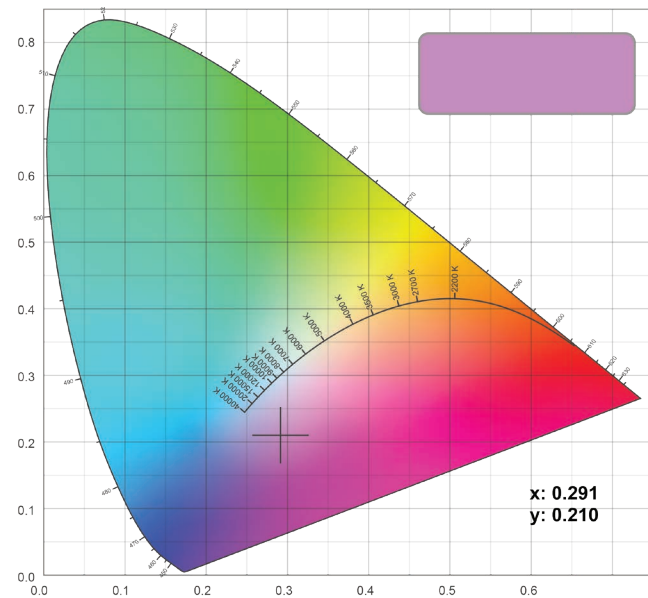
Efficacy : 32.4 lm/W

Voltage : 240V

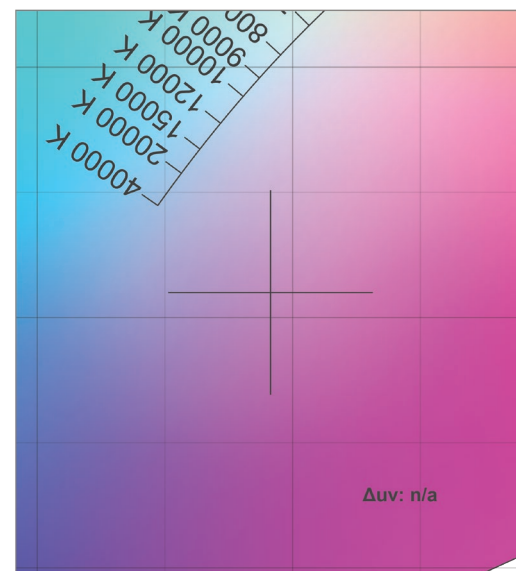
Supply Power : 50W

Supply Power Factor : 0.96

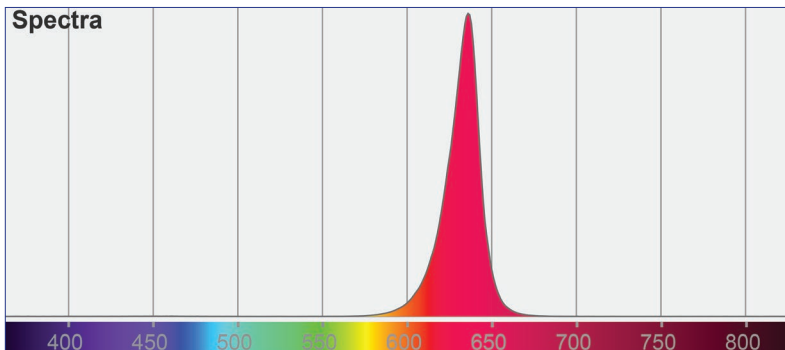
CIE 1931



CIE 1931 Zoom

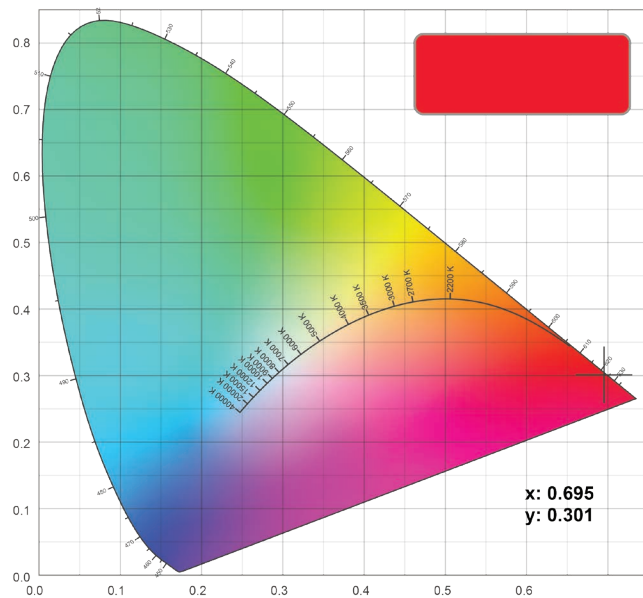


LuxEOS 9 Inground - RGBA (1700K) Colormetrics **RED**

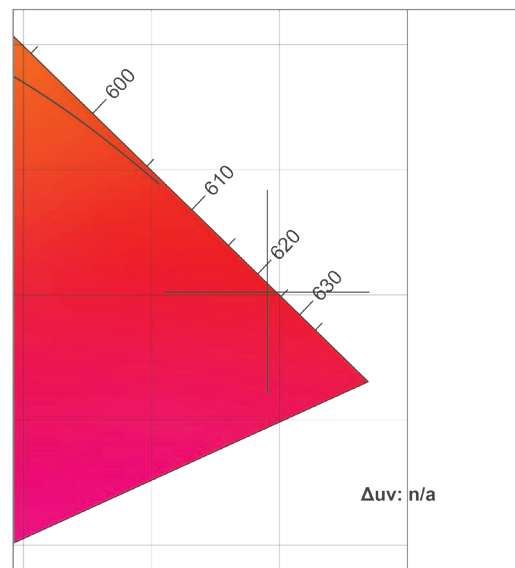


Red Lumen Output : 441 lm

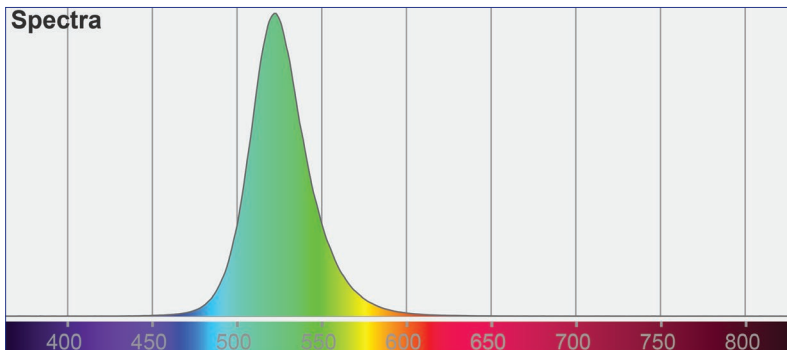
CIE 1931



CIE 1931 Zoom

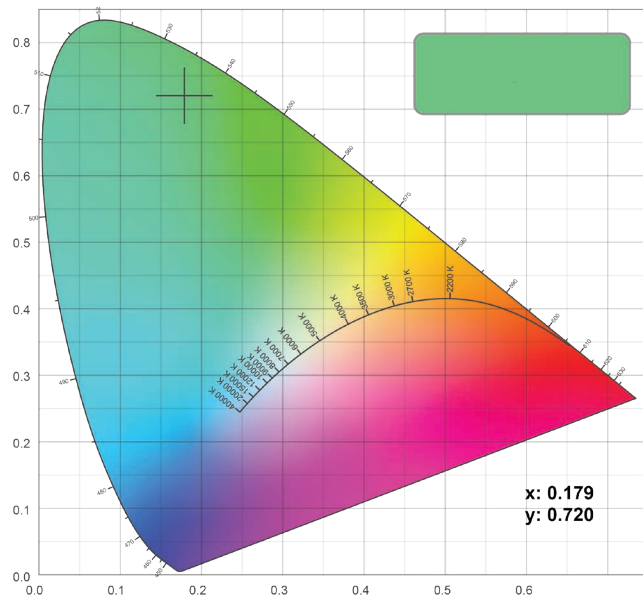


LuxEOS 9 Inground - RGBA (1700K) Colormetrics **GREEN**

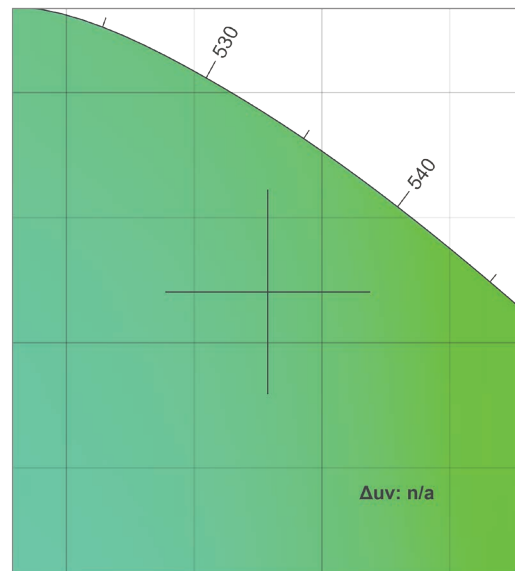


Green Lumen Output : 677 lm

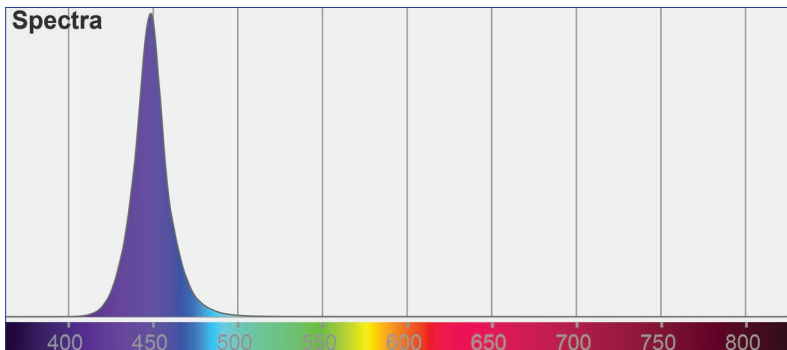
CIE 1931



CIE 1931 Zoom

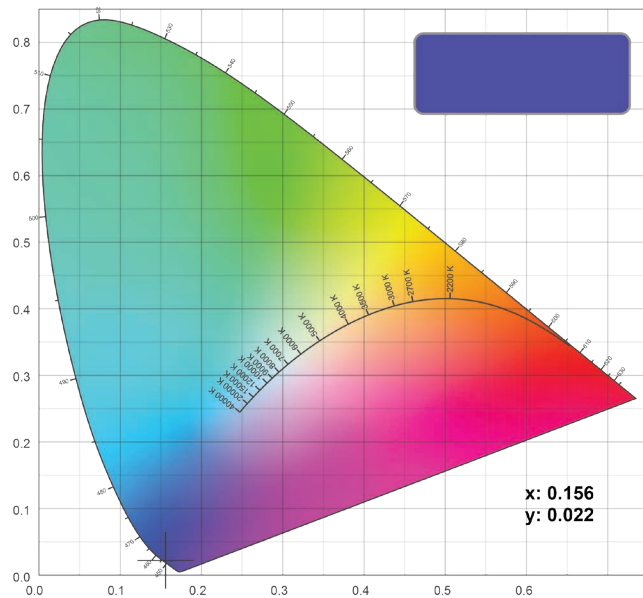


LuxEOS 9 Inground - RGBA (1700K) Colormetrics **BLUE**

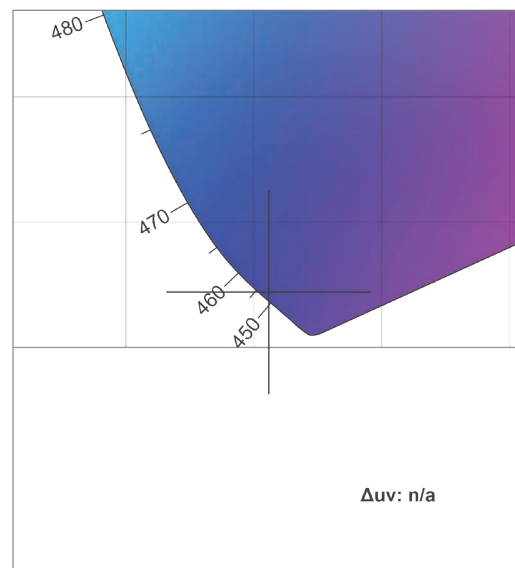


Blue Lumen Output : 149 lm

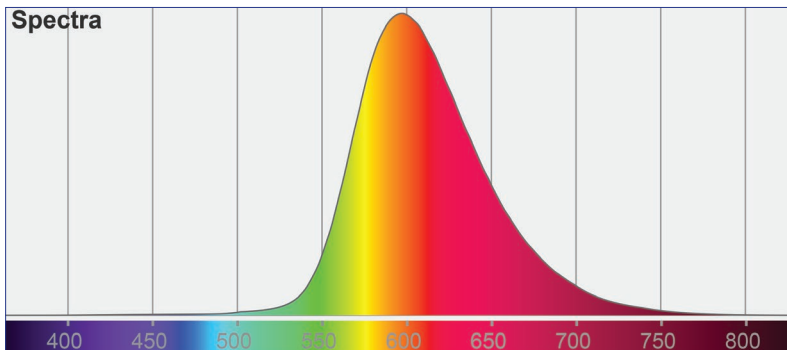
CIE 1931



CIE 1931 Zoom

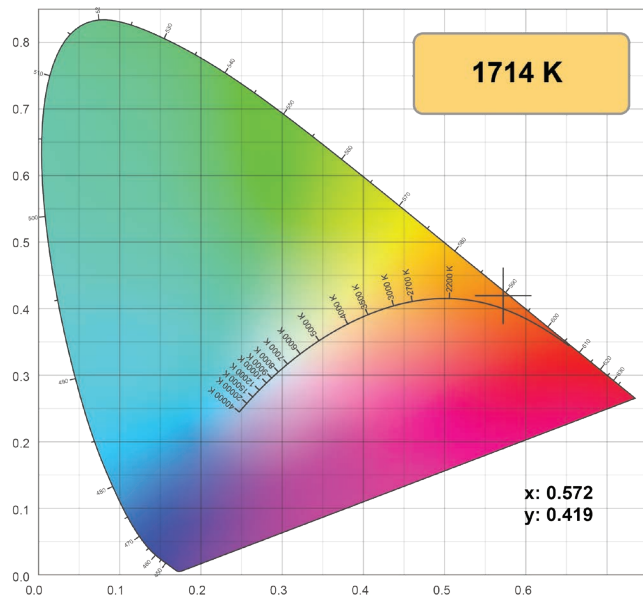


LuxEOS 9 Inground - RGBA (1700K) Colormetrics **AMBER 1700K**

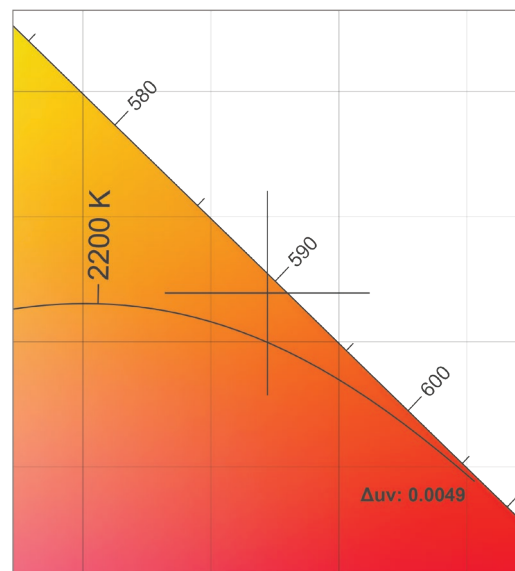


Amber 1700K Lumen Output : 823 lm

CIE 1931



CIE 1931 Zoom



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

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PULSAR

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