

LuxEOS 9 Inground VIVID COLOUR

LED INGROUND FLOOD FOR ARCHITECTURAL LIGHTING



LuxEOS 9 Inground RGBW (2700K)
10° 20° 40° 80° 10x60° 60x10°

Tested By
DW Windsor Group Laboratory
Hoddesdon
UK

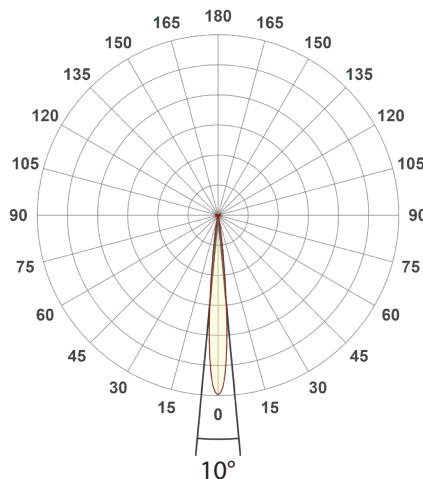
Date
Sept 2021

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

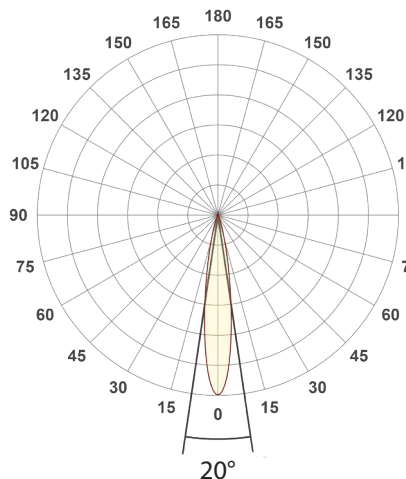
Weight
3.9 kgs (lbs)

Polar Distribution

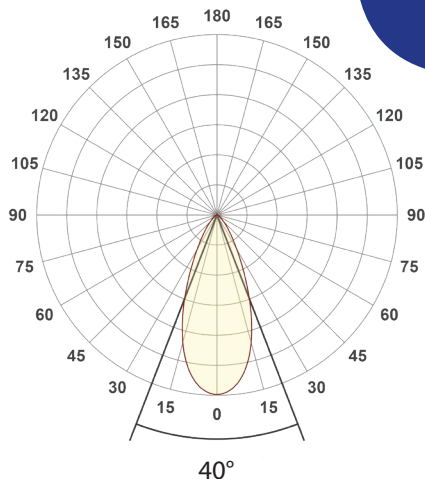
10° Conical Beam (Native)



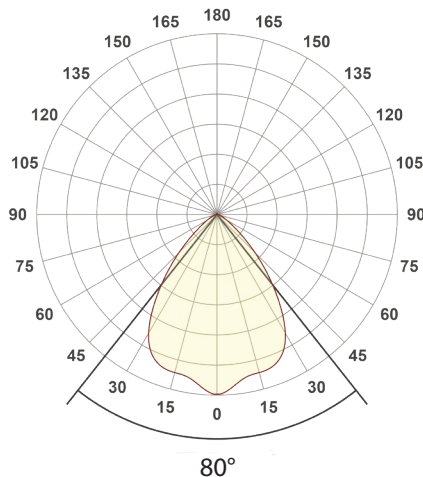
20° Conical Beam (With HBS)



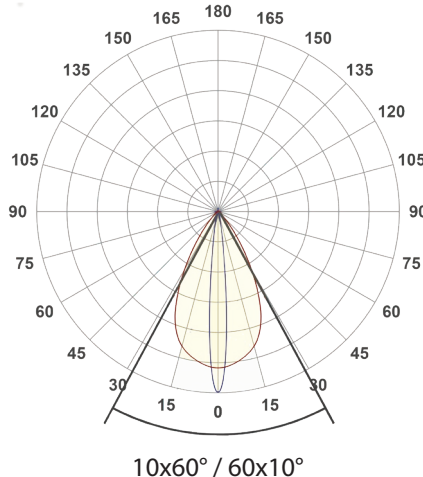
40° Conical Beam (With HBS)



80° Conical Beam (With HBS)

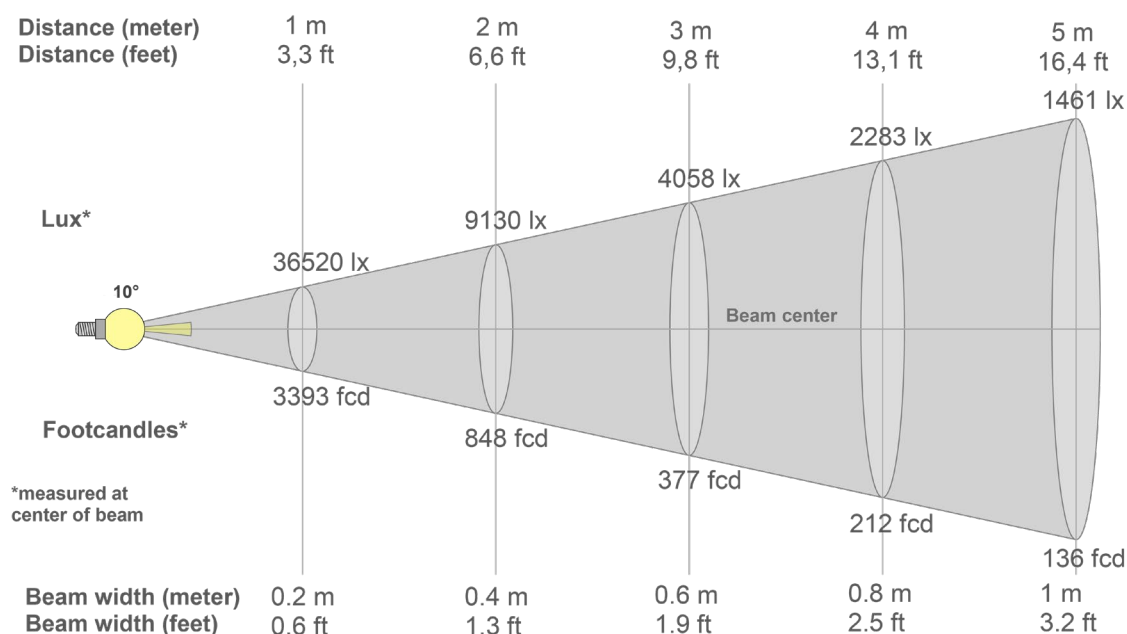


10x60° / 60x10° Elliptical Beam (With HBS)



LuxEOS 9 Inground - RGBW (2700K)

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
36520lx	9130lx	4058lx	2283lx	1461lx	1014lx	745lx	571lx	451lx	365lx	302lx	254lx	216lx	186lx	162lx	143lx	126lx	113lx	101lx	91lx
3392.8fc	848.2fc	377fc	212.1fc	135.7fc	94.2fc	69.2fc	53fc	41.9fc	33.9fc	28fc	23.6fc	20.1fc	17.3fc	15.1fc	13.3fc	11.7fc	10.5fc	9.4fc	8.5fc

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°
36.5K	36.0K	34.3K	31.4K	26.9K	21.2K	15.5K	10.4K	6.7K	4.1K	2.6K	1.8K	1.4K	1.2K	1.0K	0.9K	0.7K	0.6K	0.5K	0.4K
100%	98%	94%	86%	74%	58%	42%	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°
36.5K	36.0K	34.3K	31.4K	26.9K	21.2K	15.5K	10.4K	6.7K	4.1K	2.6K	1.8K	1.4K	1.2K	1.0K	0.9K	0.7K	0.6K	0.5K	0.4K
100%	98%	94%	86%	74%	58%	42%	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°
36.5K	36.0K	34.3K	31.4K	26.9K	21.2K	15.5K	10.4K	6.7K	4.1K	2.6K	1.8K	1.4K	1.2K	1.0K	0.9K	0.7K	0.6K	0.5K	0.4K
100%	98%	94%	86%	74%	58%	42%	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°
36.5K	36.0K	34.3K	31.4K	26.9K	21.2K	15.5K	10.4K	6.7K	4.1K	2.6K	1.8K	1.4K	1.2K	1.0K	0.9K	0.7K	0.6K	0.5K	0.4K
100%	98%	94%	86%	74%	58%	42%	29%	18%	11%	7%	5%	4%	3%	3%	2%	2%	2%	1%	1%

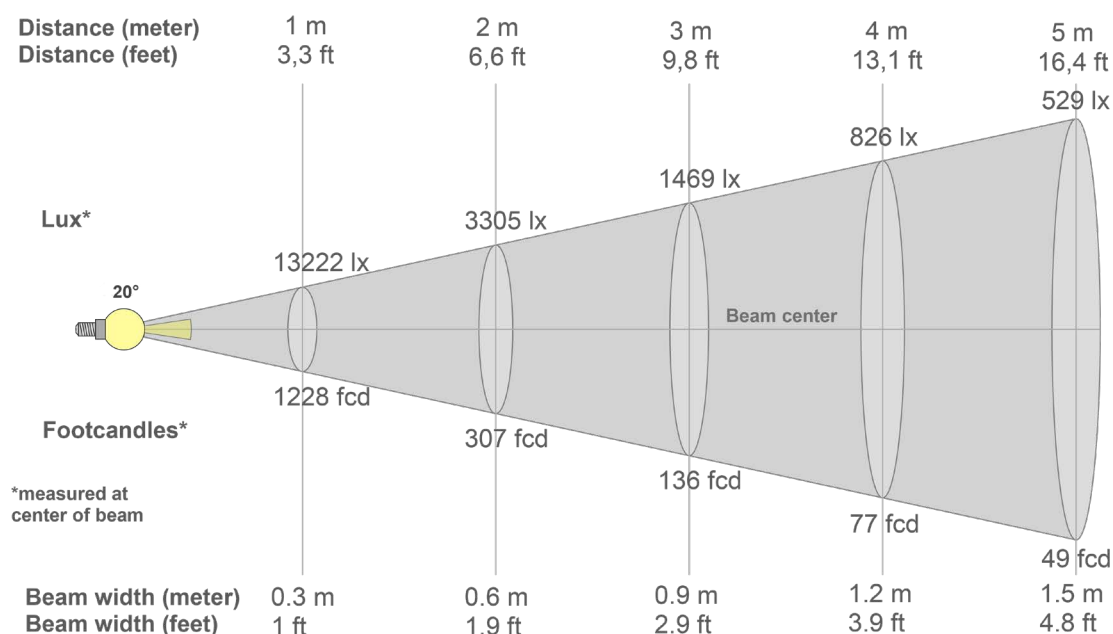
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
11°	18.5°	29.3°	97.8%	96.4%

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LuxEOS 9 Inground - RGBW (2700K)

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
13222lx	3305lx	1469lx	826lx	529lx	367lx	270lx	207lx	163lx	132lx	109lx	92lx	78lx	67lx	59lx	52lx	46lx	41lx	37lx	33lx
1228.4fc	307.1fc	136.5fc	76.8fc	49.1fc	34.1fc	25.1fc	19.2fc	15.2fc	12.3fc	10.2fc	8.5fc	7.3fc	6.3fc	5.5fc	4.8fc	4.3fc	3.8fc	3.4fc	3.1fc

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°
13.2K	13.1K	12.7K	12.1K	11.2K	10.3K	9.2K	8.1K	7.0K	6.0K	5.0K	4.2K	3.4K	2.8K	2.3K	1.8K	1.5K	1.2K	1.0K	0.8K
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°
13.2K	13.1K	12.7K	12.1K	11.2K	10.3K	9.2K	8.1K	7.0K	6.0K	5.0K	4.2K	3.4K	2.8K	2.3K	1.8K	1.5K	1.2K	1.0K	0.8K
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°
13.2K	13.1K	12.7K	12.1K	11.2K	10.3K	9.2K	8.1K	7.0K	6.0K	5.0K	4.2K	3.4K	2.8K	2.3K	1.8K	1.5K	1.2K	1.0K	0.8K
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°
13.2K	13.1K	12.7K	12.1K	11.2K	10.3K	9.2K	8.1K	7.0K	6.0K	5.0K	4.2K	3.4K	2.8K	2.3K	1.8K	1.5K	1.2K	1.0K	0.8K
100%	99%	96%	91%	85%	78%	70%	61%	53%	45%	38%	32%	26%	21%	17%	14%	11%	9%	7%	6%

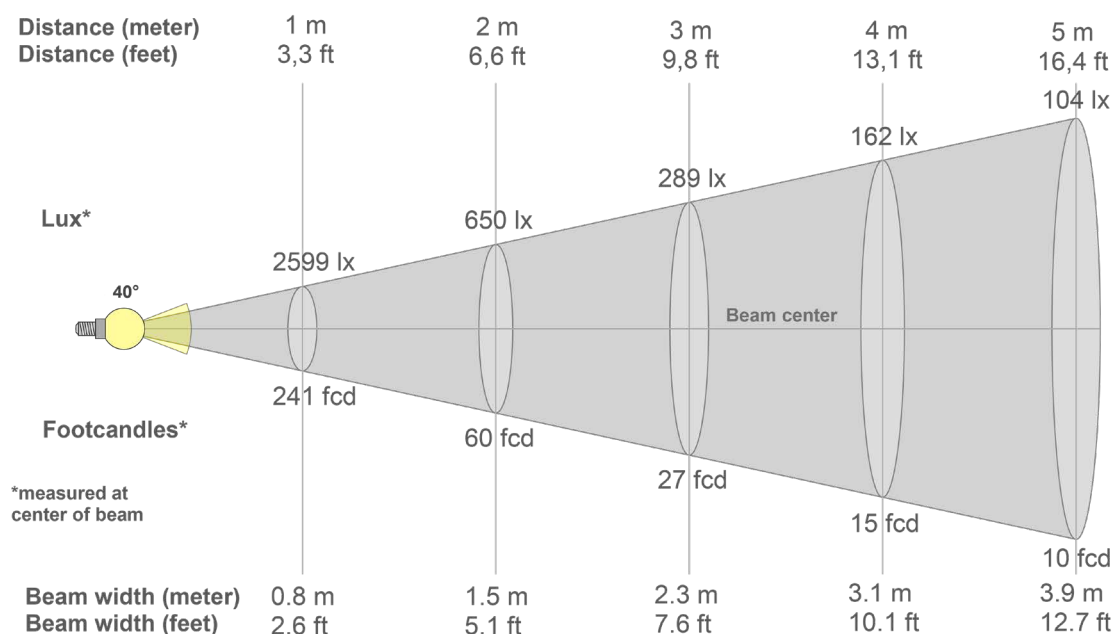
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16.8°	33.1°	47.6°	97.0%	94.9%

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LuxEOS 9 Inground - RGBW (2700K)

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
2599lx	650lx	289lx	162lx	104lx	72lx	53lx	41lx	32lx	26lx	21lx	18lx	15lx	13lx	12lx	10lx	9lx	8lx	7lx	6lx
241.4fc	60.4fc	26.8fc	15.1fc	9.7fc	6.7fc	4.9fc	3.8fc	3fc	2.4fc	2fc	1.7fc	1.4fc	1.2fc	1.1fc	0.9fc	0.8fc	0.7fc	0.7fc	0.6fc

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°
2599	2588	2553	2494	2409	2299	2163	2002	1820	1622	1417	1213	1021	848	700	576	474	392	324	268
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°
2599	2588	2553	2494	2409	2299	2163	2002	1820	1622	1417	1213	1021	848	700	576	474	392	324	268
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°
2599	2588	2553	2494	2409	2299	2163	2002	1820	1622	1417	1213	1021	848	700	576	474	392	324	268
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°
2599	2588	2553	2494	2409	2299	2163	2002	1820	1622	1417	1213	1021	848	700	576	474	392	324	268
100%	100%	98%	96%	93%	88%	83%	77%	70%	62%	55%	47%	39%	33%	27%	22%	18%	15%	12%	10%

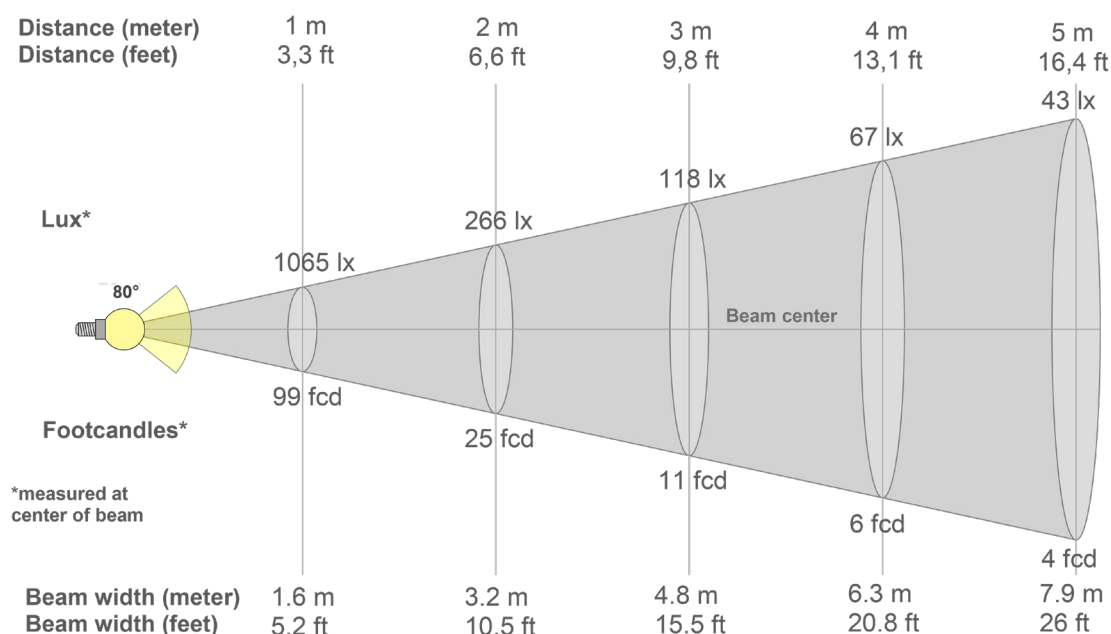
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
42.3°	76.6°	105.5°	96.7%	90.9%

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LuxEOS 9 Inground - RGBW (2700K)

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
1065lx	266lx	118lx	67lx	43lx	30lx	22lx	17lx	13lx	11lx	9lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx	3lx	3lx
98.9fc	24.7fc	11fc	6.2fc	4fc	2.7fc	2fc	1.5fc	1.2fc	1fc	0.8fc	0.7fc	0.6fc	0.5fc	0.4fc	0.4fc	0.3fc	0.3fc	0.3fc	0.2fc

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°
1065	1030	981	971	961	915	812	652	478	319	192	111	66	42	27	17	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°
1065	1030	981	971	961	915	812	652	478	319	192	111	66	42	27	17	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°
1065	1030	981	971	961	915	812	652	478	319	192	111	66	42	27	17	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°
1065	1030	981	971	961	915	812	652	478	319	192	111	66	42	27	17	8	2	1	0
100%	97%	92%	91%	90%	86%	76%	61%	45%	30%	18%	10%	6%	4%	3%	2%	1%	0%	0%	0%

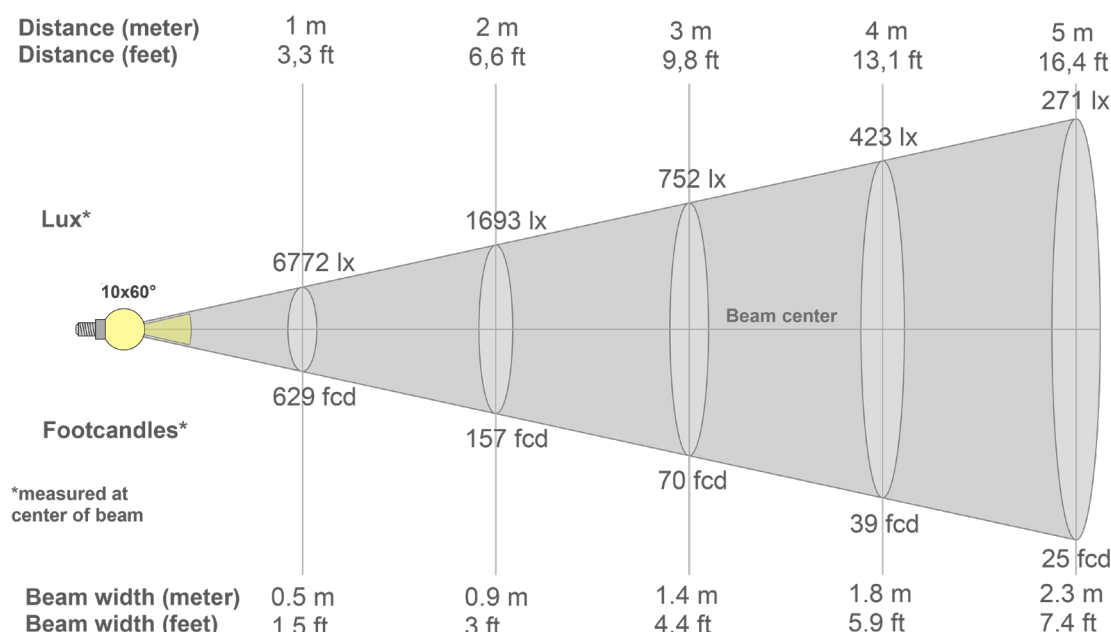
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
76.8°	110.8°	140.5°	95.0%	82.4%

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LuxEOS 9 Inground - RGBW (2700K)

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
6772lx	1693lx	752lx	423lx	271lx	188lx	138lx	106lx	84lx	68lx	56lx	47lx	40lx	35lx	30lx	26lx	23lx	21lx	19lx	17lx
629.2fc	157.3fc	69.9fc	39.3fc	25.2fc	17.5fc	12.8fc	9.8fc	7.8fc	6.3fc	5.2fc	4.4fc	3.7fc	3.2fc	2.8fc	2.5fc	2.2fc	1.9fc	1.7fc	1.6fc

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°
6772	6351	6303	6227	6135	6030	5907	5760	5574	5335	5035	4667	4229	3740	3231	2725	2242	1797	1402	1069
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°
6772	6697	4961	2985	1612	947	643	457	322	230	171	133	107	86	72	62	53	46	41	35
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°
6772	6351	6303	6227	6135	6030	5907	5760	5574	5335	5035	4667	4229	3740	3231	2725	2242	1797	1402	1069
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°
6772	6697	4961	2985	1612	947	643	457	322	230	171	133	107	86	72	62	53	46	41	35
100%	99%	73%	44%	24%	14%	9%	7%	5%	3%	3%	2%	2%	1%	1%	1%	1%	1%	1%	1%

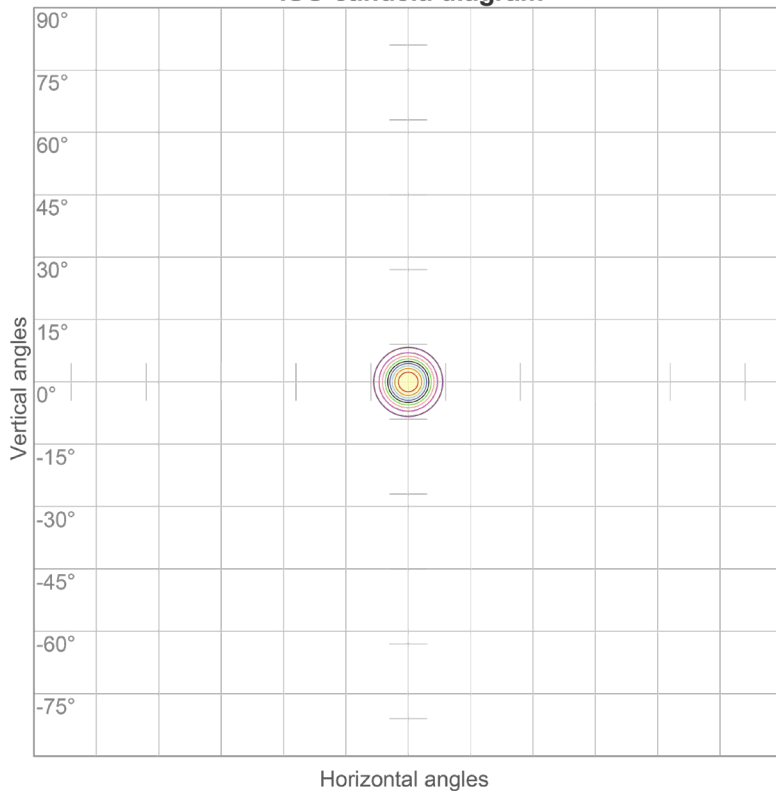
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
25.5°	45.7°	66.1°	97.5%	94.0%

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ISO candela diagram



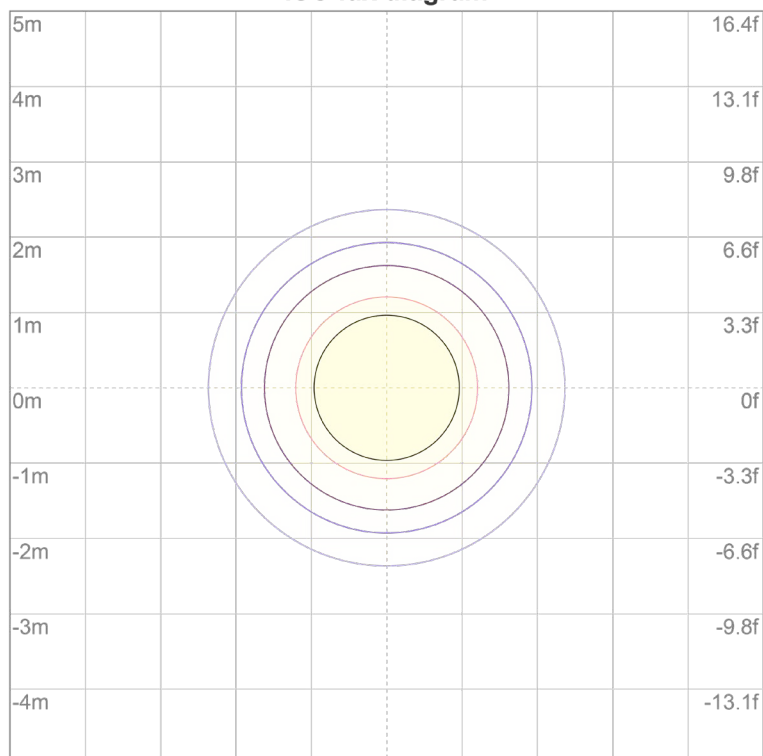
10%	3652 cd
20%	7304 cd
30%	10956 cd
40%	14608 cd
50%	18260 cd
60%	21912 cd
70%	25564 cd
80%	29216 cd
90%	32868 cd

Conditions:

Number of c-planes: 72

Candela at center: 36520 cd

ISO lux diagram



3%	11.0 lx
5%	18.3 lx
10%	36.5 lx
30%	110 lx
50%	183 lx

Conditions:

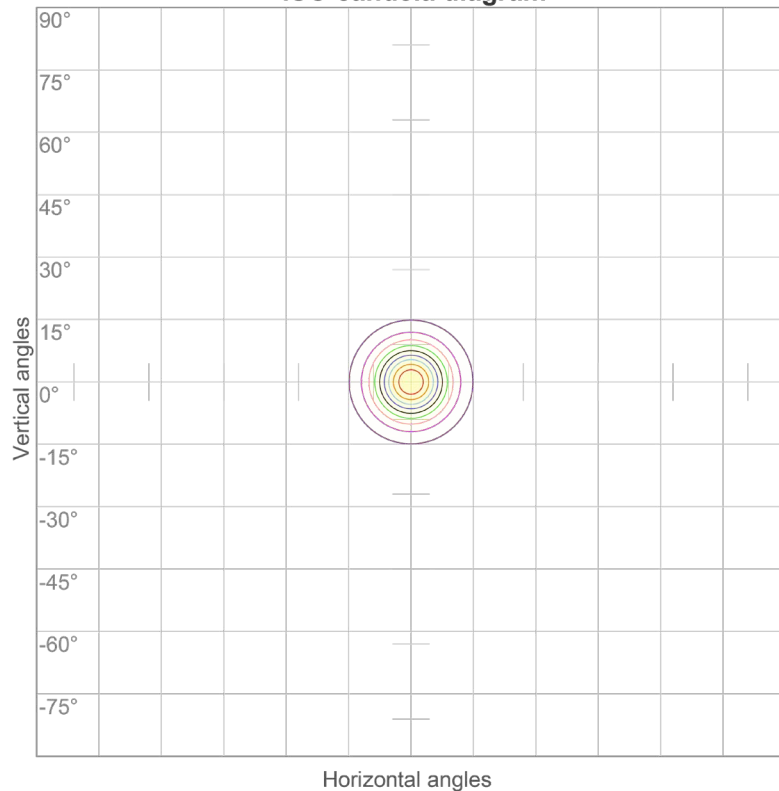
Number of c-planes: 72

Lux at center: 365 lx

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



ISO candela diagram



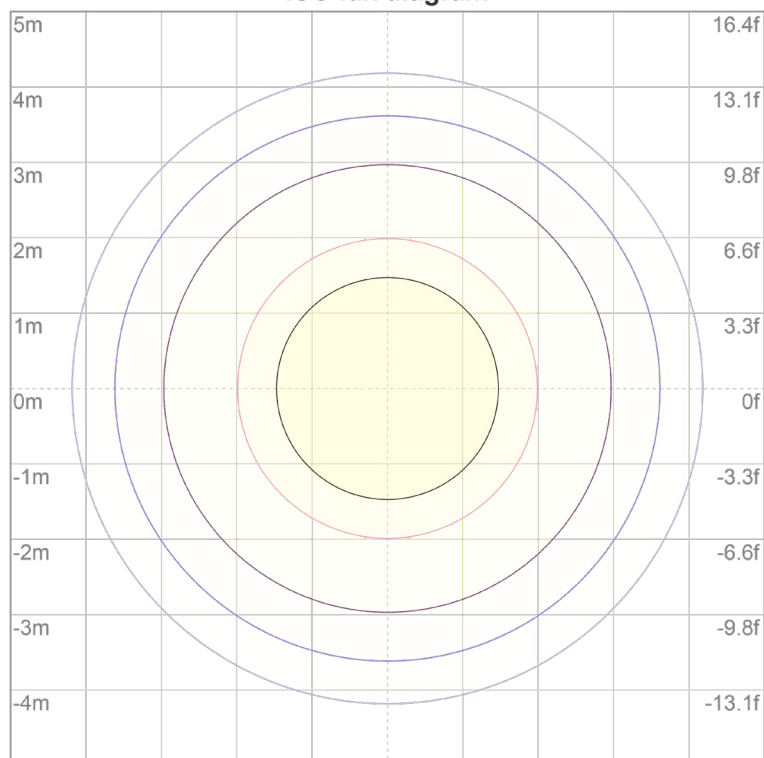
10%	1322 cd
20%	2644 cd
30%	3967 cd
40%	5289 cd
50%	6611 cd
60%	7933 cd
70%	9255 cd
80%	10577 cd
90%	11900 cd

Conditions:

Number of c-planes: 72

Candela at center: 13222 cd

ISO lux diagram



3%	3.97 lx
5%	6.61 lx
10%	13.2 lx
30%	39.7 lx
50%	66.1 lx

Conditions:

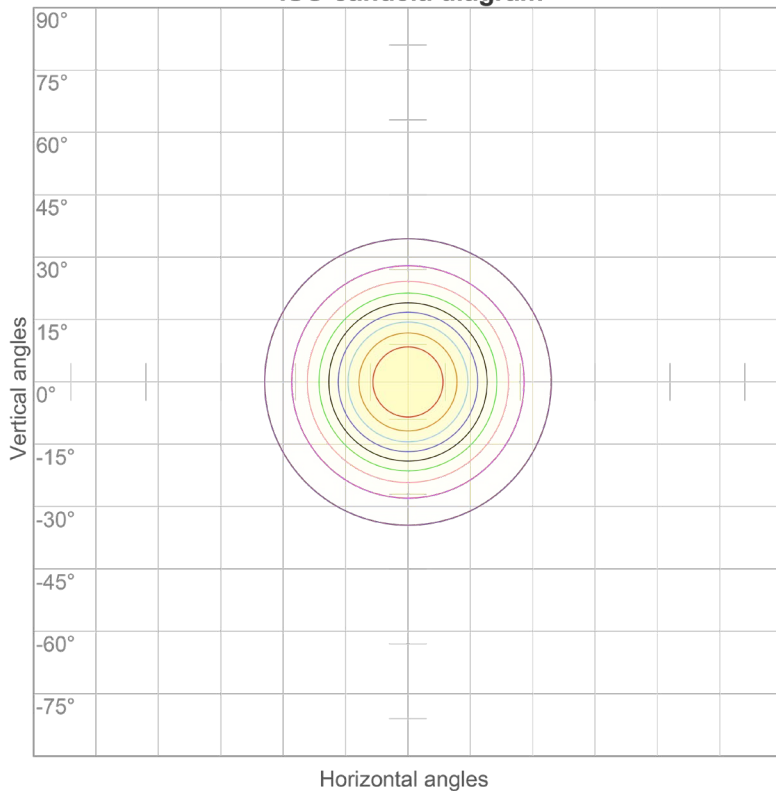
Number of c-planes: 72

Lux at center: 132 lx

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



ISO candela diagram



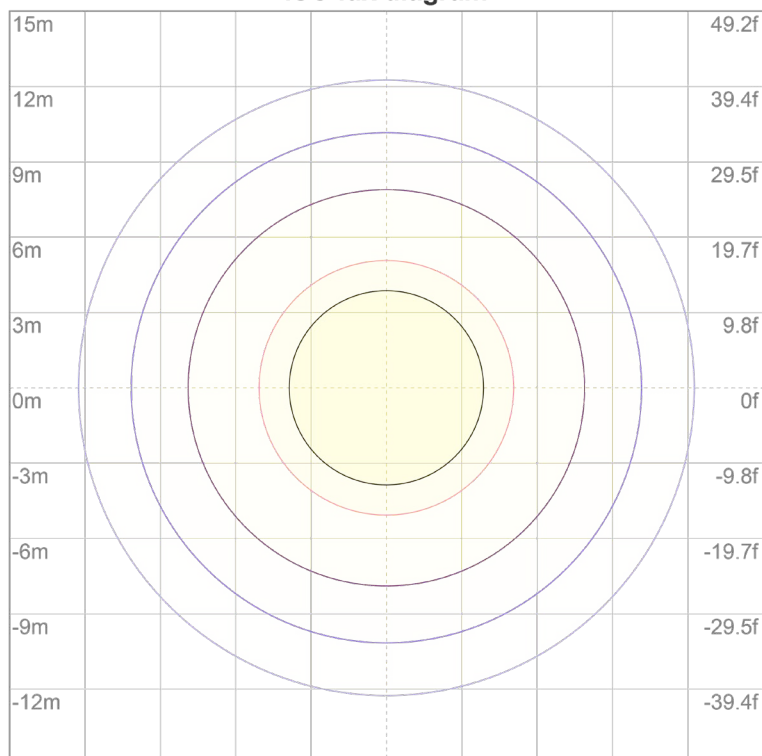
10%	260 cd
20%	520 cd
30%	780 cd
40%	1039 cd
50%	1299 cd
60%	1559 cd
70%	1819 cd
80%	2079 cd
90%	2339 cd

Conditions:

Number of c-planes: 72

Candela at center: 2599 cd

ISO lux diagram



3%	0.780 lx
5%	1.30 lx
10%	2.60 lx
30%	7.80 lx
50%	13.0 lx

Conditions:

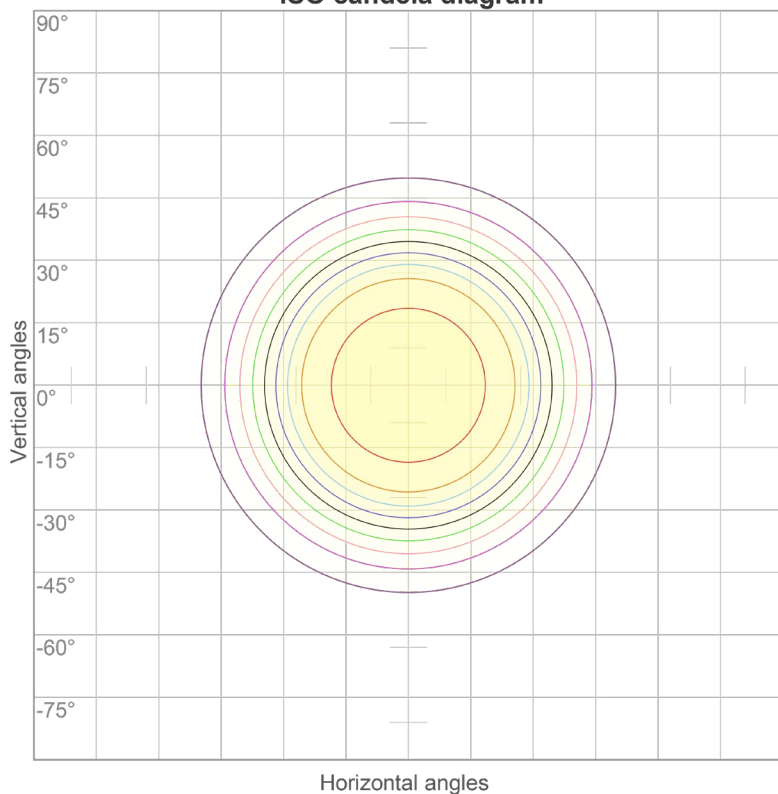
Number of c-planes: 72

Lux at center: 26.0 lx

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



ISO candela diagram



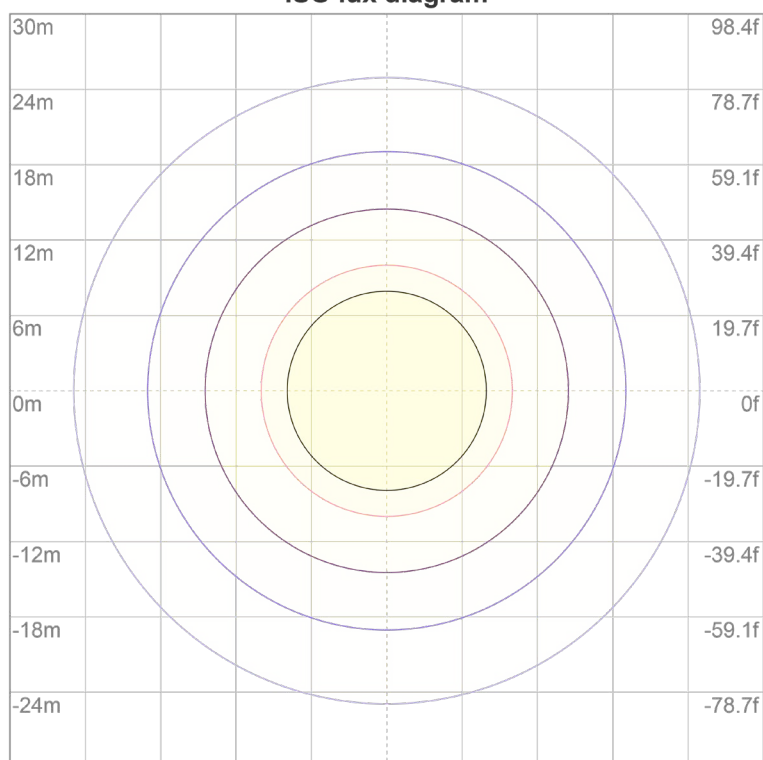
10%	106 cd
20%	213 cd
30%	319 cd
40%	426 cd
50%	532 cd
60%	639 cd
70%	745 cd
80%	852 cd
90%	958 cd

Conditions:

Number of c-planes: 72

Candela at center: 1065 cd

ISO lux diagram



3%	0.319 lx
5%	0.532 lx
10%	1.06 lx
30%	3.19 lx
50%	5.32 lx

Conditions:

Number of c-planes: 72

Lux at center: 10.6 lx

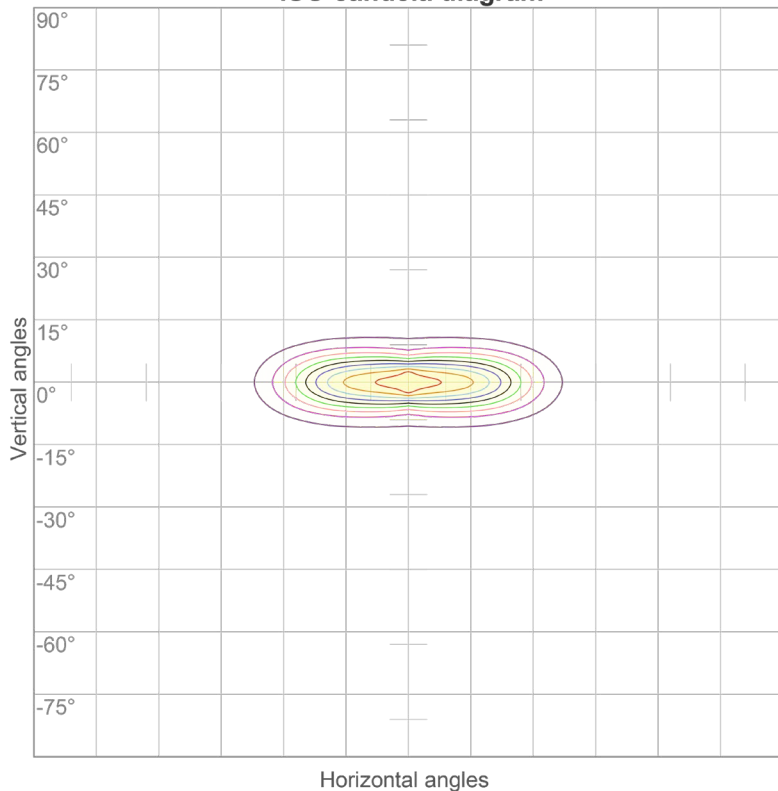
*Lux distribution on a surface
when lamp is mounted at 10
meters from the surface.*

LuxEOS 9 Inground - RGBW (2700K)

ISO Candela & ISO Lux diagrams with 10x60° & 60x10° Optics



ISO candela diagram



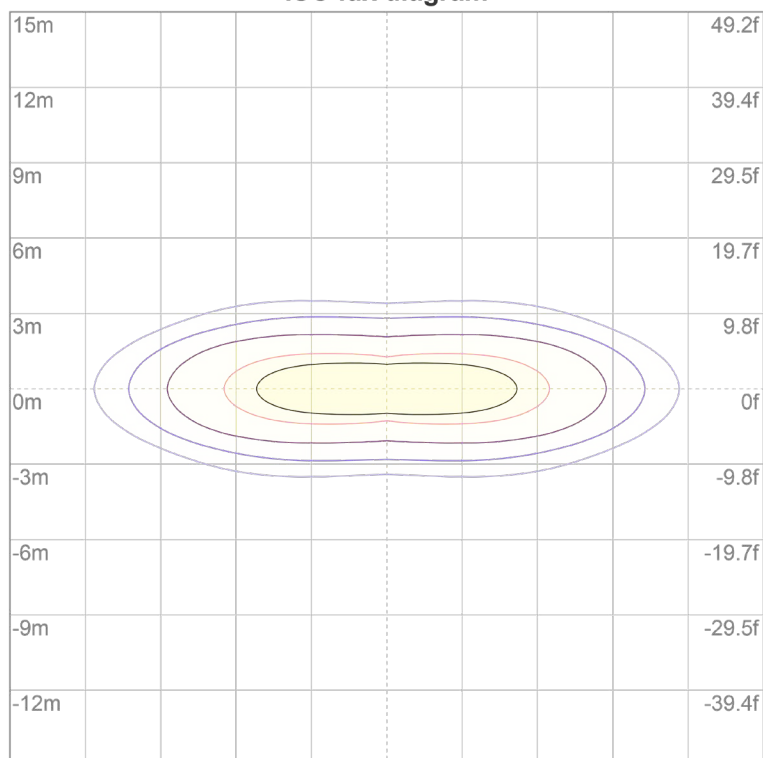
10%	677 cd
20%	1354 cd
30%	2032 cd
40%	2709 cd
50%	3386 cd
60%	4063 cd
70%	4741 cd
80%	5418 cd
90%	6095 cd

Conditions:

Number of c-planes: 72

Candela at center: 6772 cd

ISO lux diagram



3%	2.03 lx
5%	3.39 lx
10%	6.77 lx
30%	20.3 lx
50%	33.9 lx

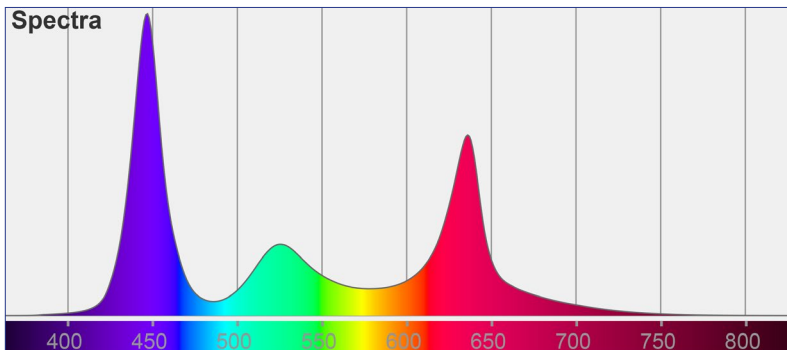
Conditions:

Number of c-planes: 72

Lux at center: 67.7 lx

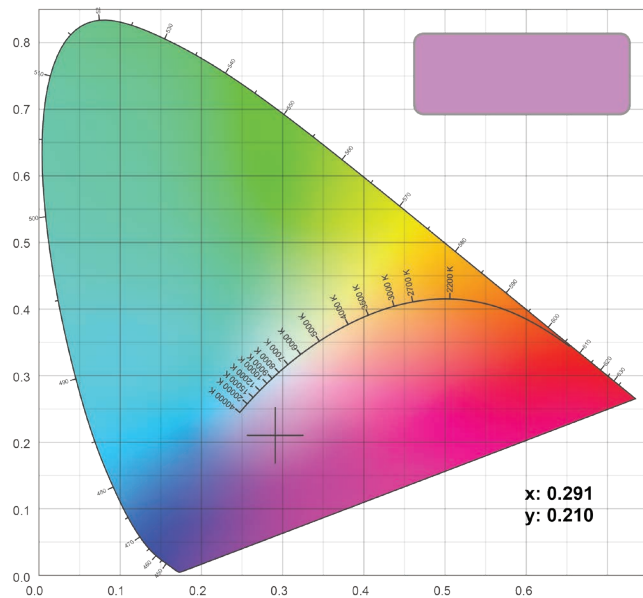
*Lux distribution on a surface
when lamp is mounted at 10
meters from the surface.*

LuxEOS 9 Inground - RGBW (2700K) Colormetrics RGBW

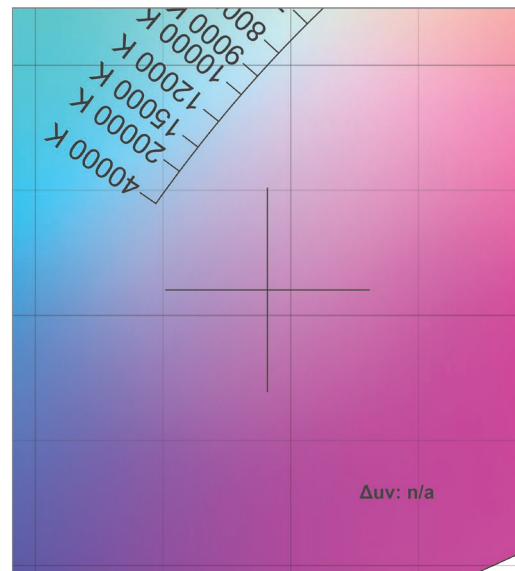


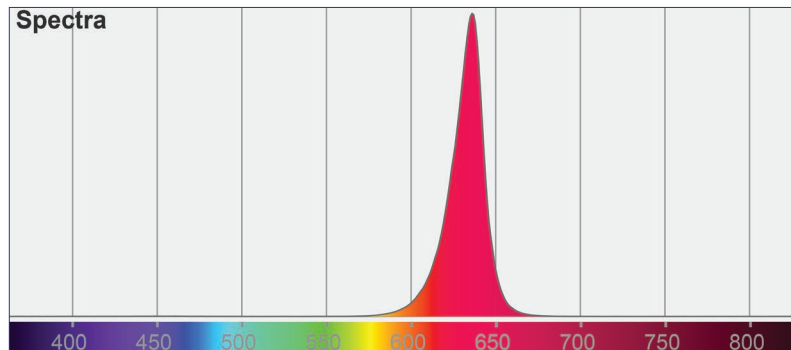
Total Lumen Output (Native) : 1723 lm
Efficacy : 34.3 lm/W
Voltage : 240V
Supply Power : 50W
Supply Power Factor : 0.97

CIE 1931



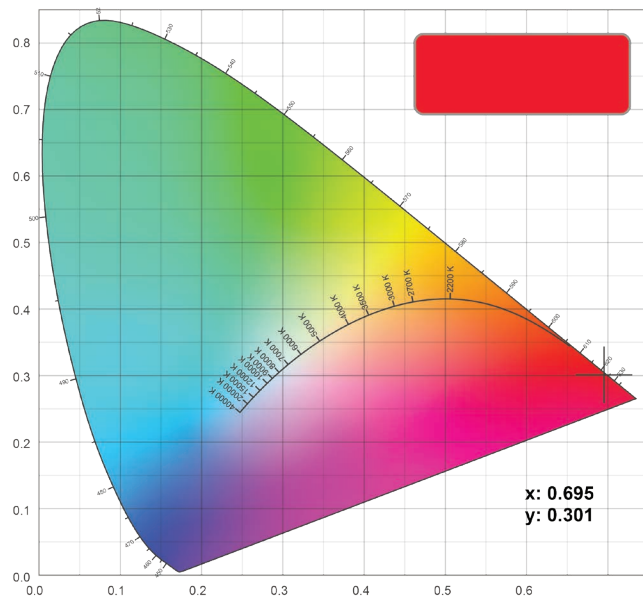
CIE 1931 Zoom



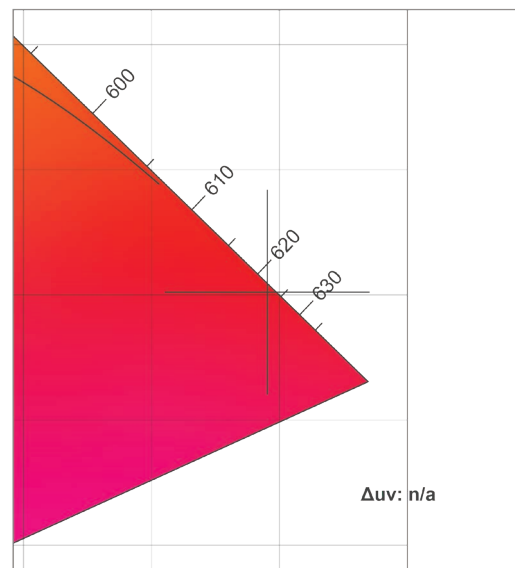


Red Lumen Output : 441 lm

CIE 1931

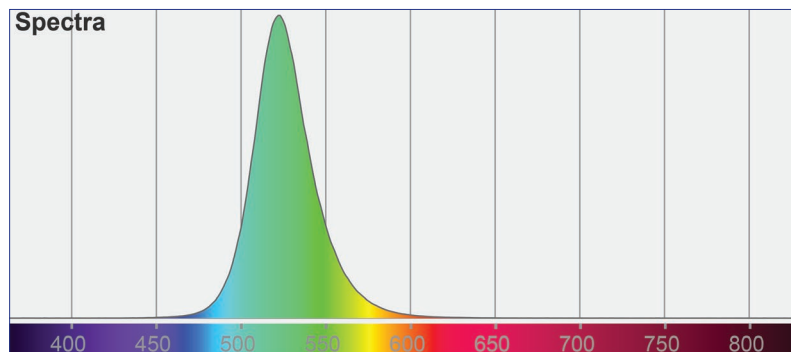


CIE 1931 Zoom



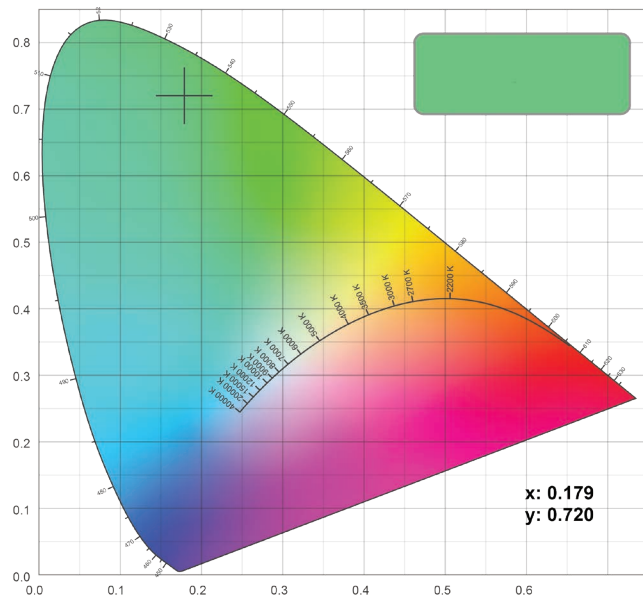
LuxEOS 9 Inground - RGBW (2700K)

Colormetrics **GREEN**

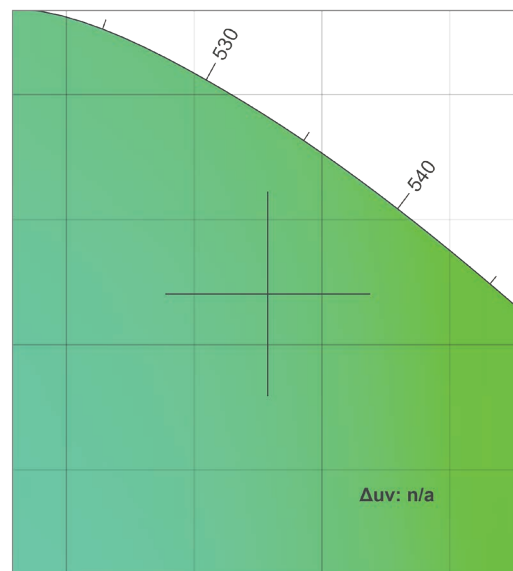


Green Lumen Output : 677 lm

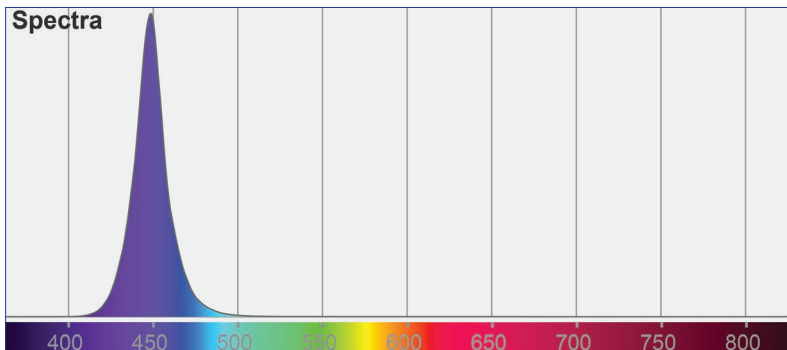
CIE 1931



CIE 1931 Zoom

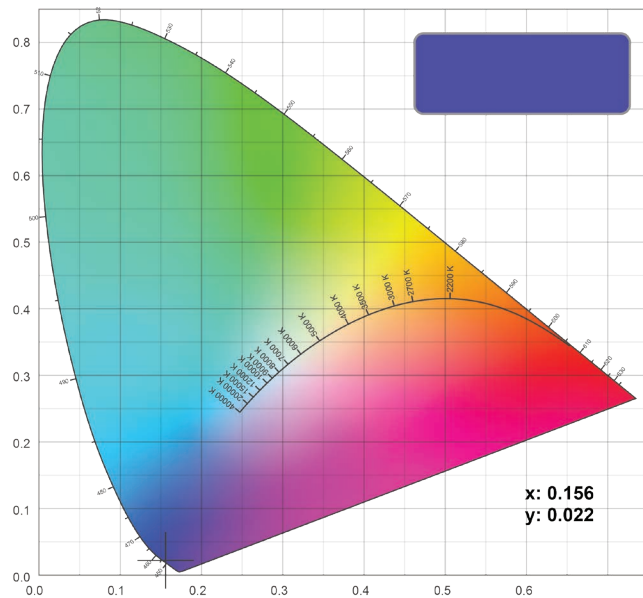


LuxEOS 9 Inground - RGBW (2700K) Colormetrics **BLUE**

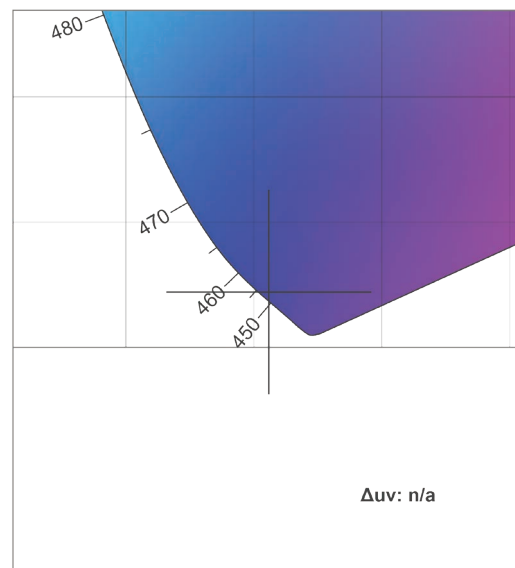


Blue Lumen Output : 149 lm

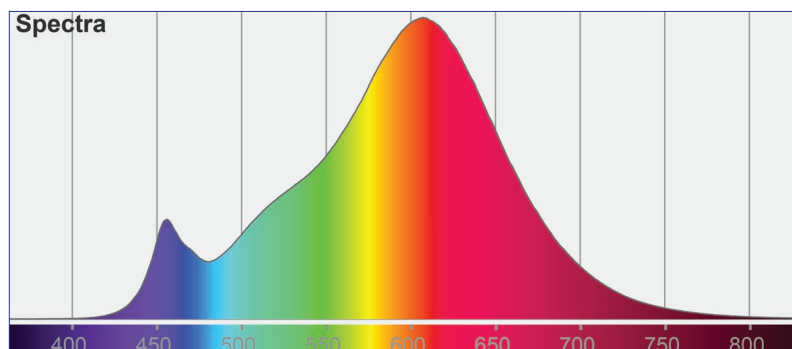
CIE 1931



CIE 1931 Zoom

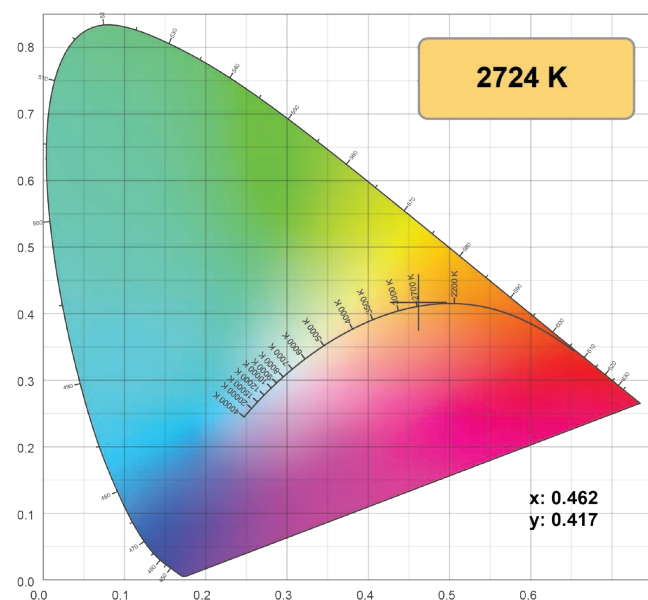


LuxEOS 9 Inground - RGBW (2700K) Colormetrics **White 2700K**

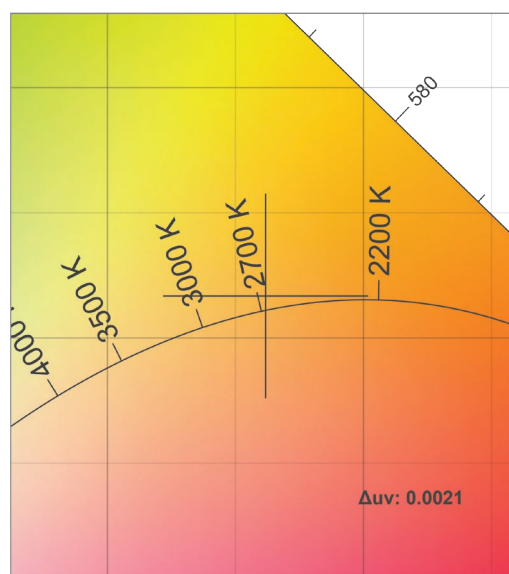


White 2700K Lumen Output : 958 lm
CRI: 90

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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