KL Panel XL IP

Photometric &

Chromaticity Test Reports

CONTENTS

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Testing Process

Total Lumen Measurements

Lumens are measured using a Viso Systems Lab Spion. As a goniophotometer, the Viso calculates the field lumens of the fixture by taking multiple measurements across the light beam.

Many lumens figures provided for entertainment lighting fixtures are only 2π sphere values, some even emphasize the LED engine lumens. All Elation product photometric data is the actual light output from the fixture lens, never a theoretical value based on calculation or using the source lumens as the fixtures output. We advise to always compare total fixture lumens acquired with identical measurement systems when comparing lighting fixtures.

Test Lab Equipment and Process

Elation operates an optical testing laboratory at its Los Angeles, CA headquarters to provide accurate photometric data for its lighting products. The testing lab is both light and climate- controlled and contains a variety of precise lighting measurement systems. Fixtures are analyzed with the sophisticated Viso Systems Lab Spion equipment, which measures all light and color parameters by panning the light beam at a precise speed and from different angles through a calibrated, laser aligned light and color sensor. Test data is collected and summarized by the Viso Light Inspector software. This type of measurement system is referred to as a Goniophotometer.

The Viso software calculates all relevant types of measurements, from beam angles, candela to center light intensity at a variety of distances to the latest color quality measurements like TM30 or CQS as well as accurate color temperature. This wealth of data is then processed by an Elation specific template which is included in the photometric test report for various fixture conditions such as zoom angles and color correction filters.

The Viso software also creates IES (Illuminating Engineering Society) files for each test report. IES is an industry standard file format created for the easy electronic transfer of photometric test data, which is widely used by lighting manufacturers for photometric data distribution.

Additionally, fixtures are periodically rechecked for accuracy using various hand-held light meters including one or more of the devices listed below. This is done to ensure the test data contained in this report is as accurate as possible.

Asenstek Lighting Passport | Konica Minolta T-10 | Sekonic C800U

Key Measurements

Output

Total Lumen Output: 29527 lm

Peak Intensity: 11608 cd

Beam

Beam Angle (50%): 101.4°

Field Angle (10%): 157.3°

Cutoff Angle (2.5%): 171.5°

Color

Color Temperature: 16378 K

CRI: 73.1

TLCI: 92

TM30 R_F: 78.7

TM30 R_g: 104.5

Power Details

Efficacy: 54 Lumen/Watt

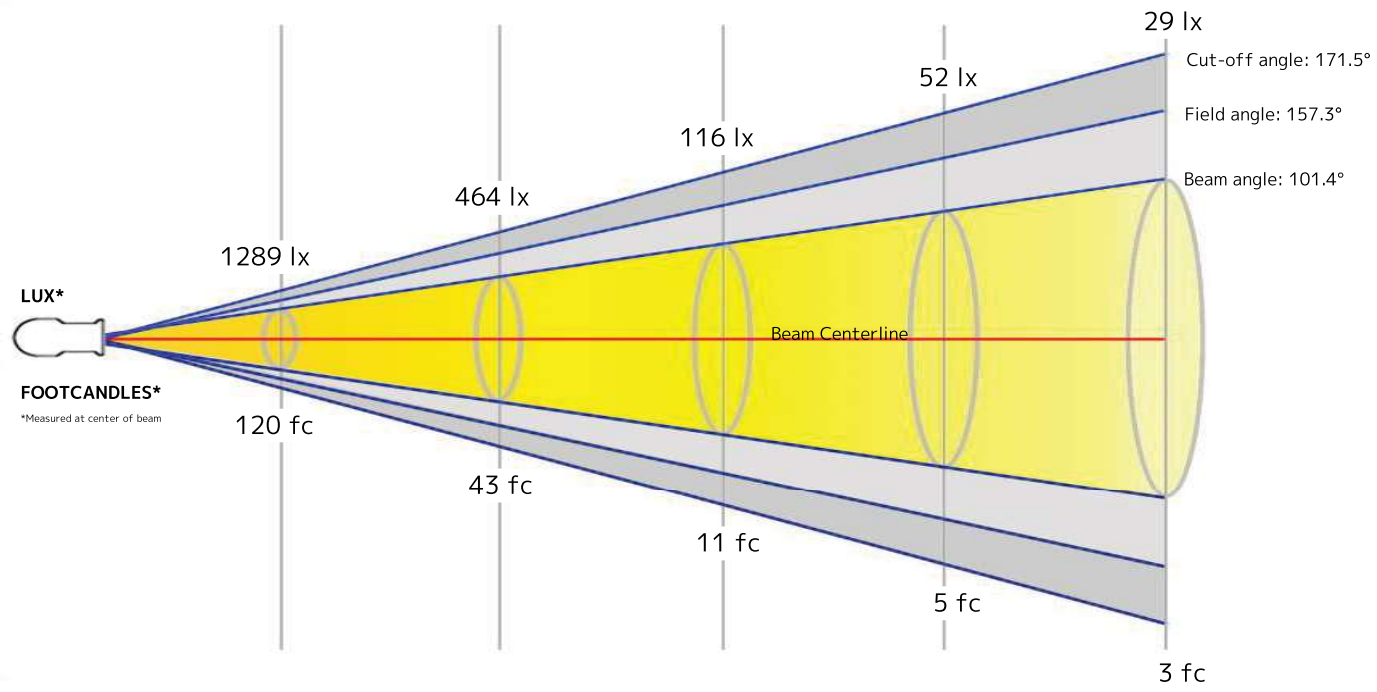
Power: 545 W

Supply Voltage: 120 V

Current: 4.55 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	7.3 m	12.2 m	24.4	36.6 m	48.8 m



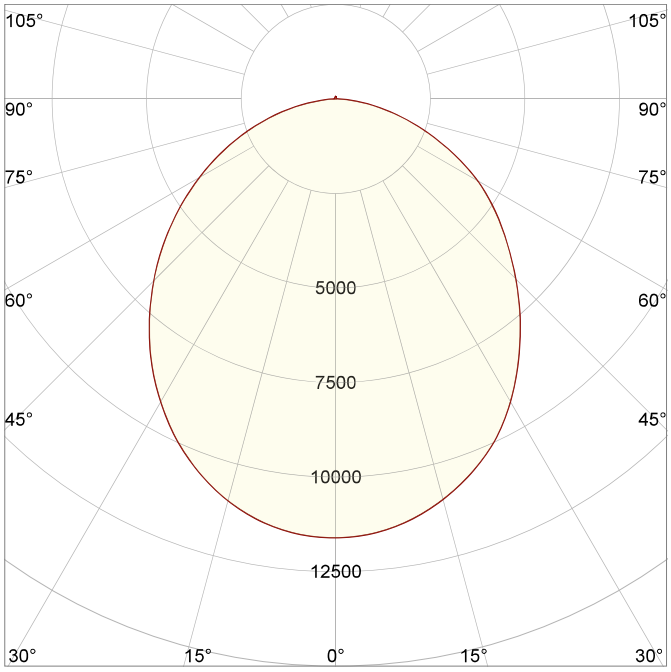
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	23.9 ft	40.1 ft	80.1 ft	120.2 ft	160.2 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	11605	2901	1289	725	464	322	237	181	143	116	96	81	69	59	52	45	40	36	32	29
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1078.1	269.5	119.8	67.4	43.1	29.9	22	16.8	13.3	10.8	8.9	7.5	6.4	5.5	4.8	4.2	3.7	3.3	3	2.7

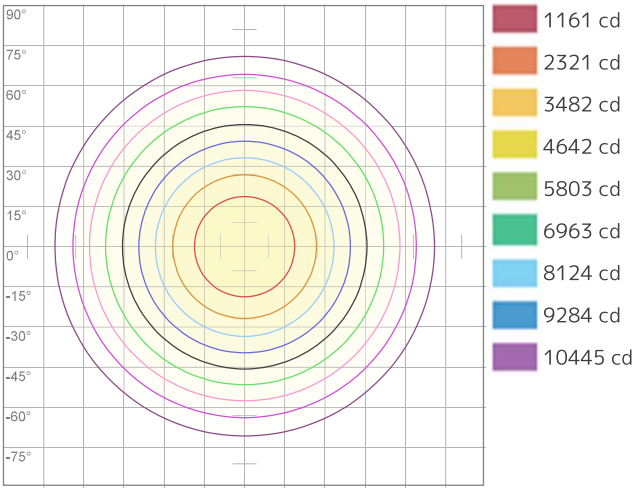
Measurement Date: 9/25/2023

Angular Distribution



Beam Angle - 50%
101.4°
Field Angle - 10%
157.3°
Cutoff Angle - 2.5%
171.5°

ISO Diagrams

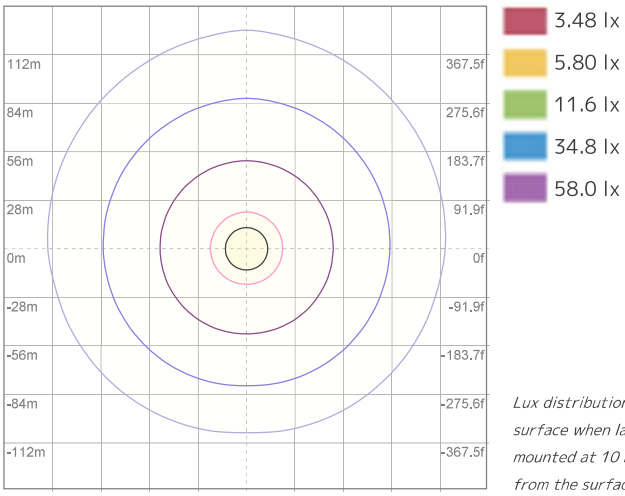


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 11605 cd



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

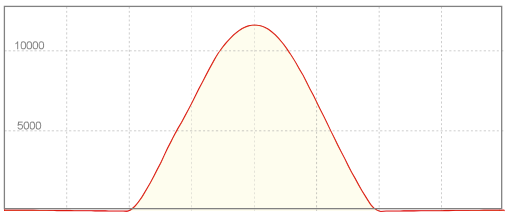
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 116 lx

Linear Distribution



Peak Candela

11608 cd

Calculate Center Beam Intensities

lux = 11608 / distance(m)^2

fc = 11608 / distance(ft)^2

Measurement Date: 9/25/2023

KL Panel XL IP (2700K)

Key Measurements

Output

Total Lumen Output: 42972 lm

Peak Intensity: 17054 cd

Beam

Beam Angle (50%): 100.3°

Field Angle (10%): 157.1°

Cutoff Angle (2.5%): 170.9°

Color

Color Temperature: 2706 K

CRI: 92.9

TLCI: 79

TM30 R_F: 90.0

TM30 R_g: 106.6

Power Details

Efficacy: 78 Lumen/Watt

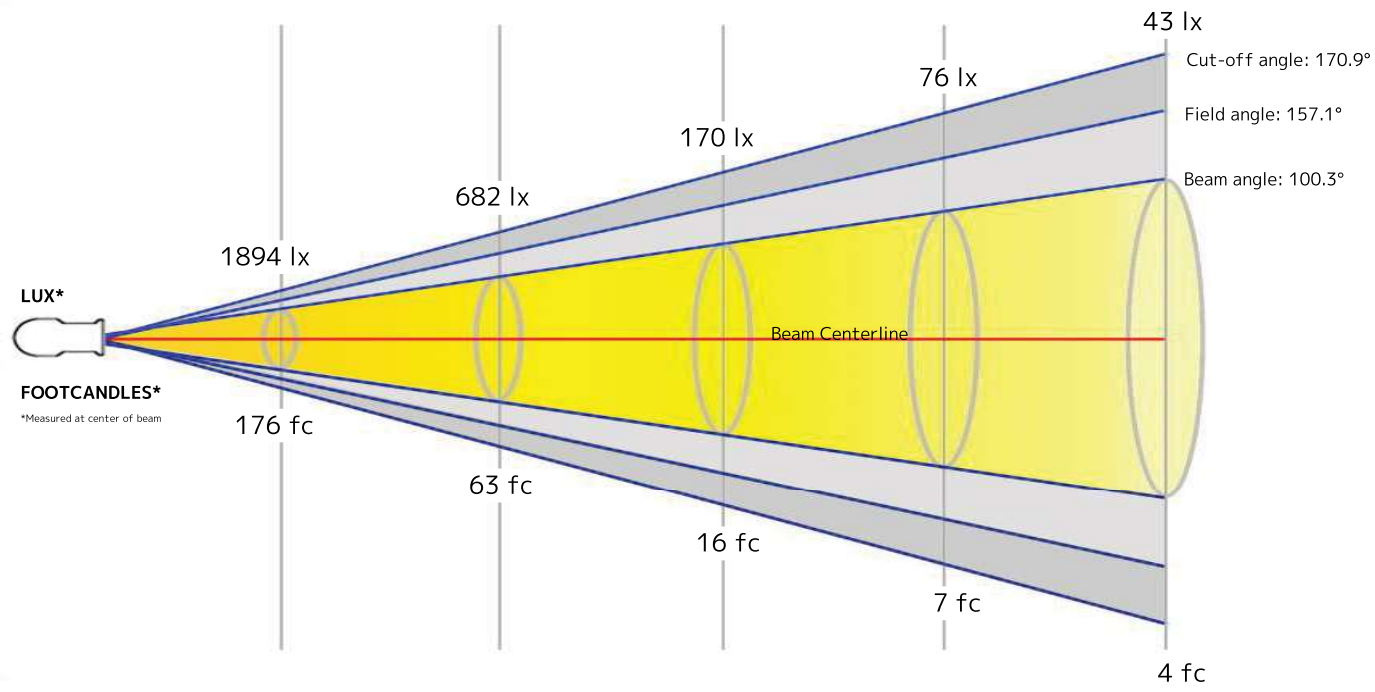
Power: 550 W

Supply Voltage: 119 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	7.2 m	12 m	24 m	35.9 m	47.9 m



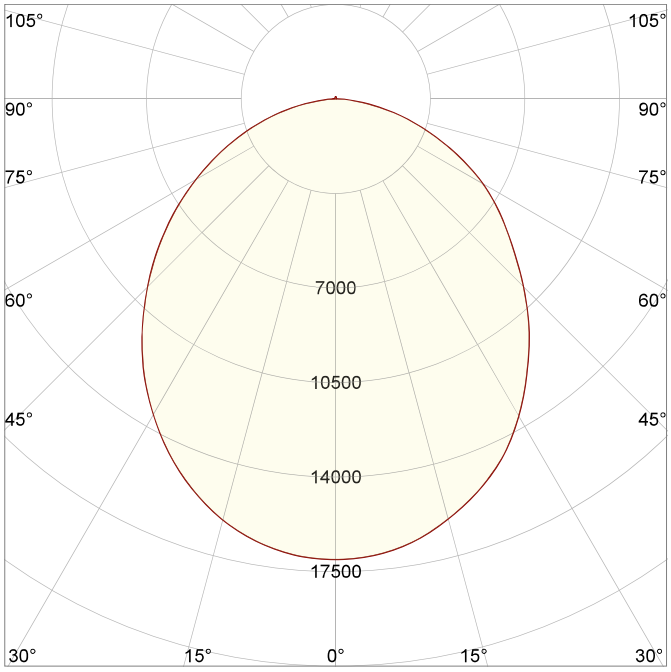
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	23.5 ft	39.3 ft	78.6 ft	117.9 ft	157.2 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	17048	4262	1894	1066	682	474	348	266	210	170	141	118	101	87	76	67	59	53	47	43
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1583.8	396	176	99	63.4	44	32.3	24.7	19.6	15.8	13.1	11	9.4	8.1	7	6.2	5.5	4.9	4.4	4

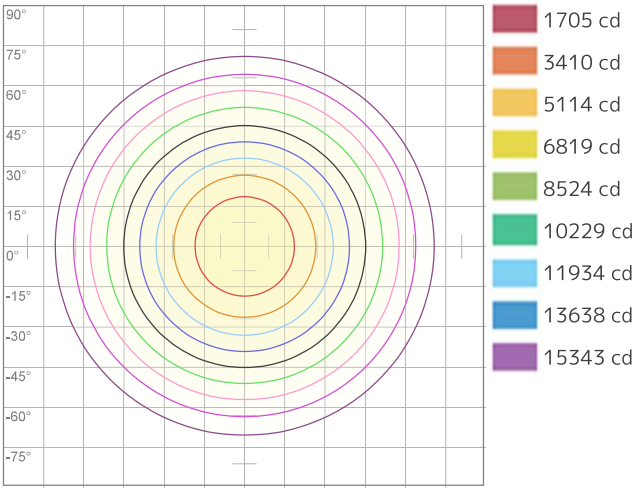
Measurement Date: 9/25/2023

Angular Distribution



Beam Angle - 50%
100.3°
Field Angle - 10%
157.1°
Cutoff Angle - 2.5%
170.9°

ISO Diagrams

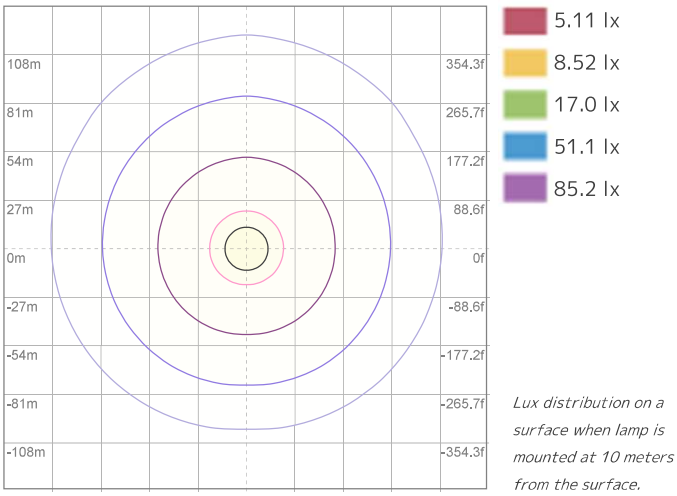


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 17048 cd



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

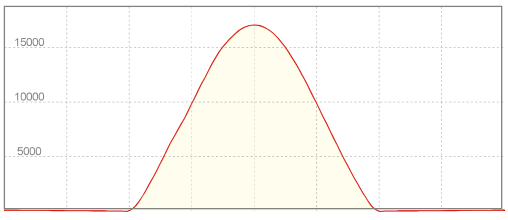
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 170 lx

Linear Distribution



Peak Candela

17054 cd

Calculate Center Beam Intensities

lux = 17054 / distance(m)^2

fc = 17054 / distance(ft)^2

Measurement Date: 9/25/2023

Key Measurements

Output

Total Lumen Output: 39647 lm

Peak Intensity: 15675 cd

Beam

Beam Angle (50%): 100.7°

Field Angle (10%): 157°

Cutoff Angle (2.5%): 171°

Color

Color Temperature: 3235 K

CRI: 90.6

TLCI: 83

TM30 R_F: 90.7

TM30 R_g: 107.5

Power Details

Efficacy: 77 Lumen/Watt

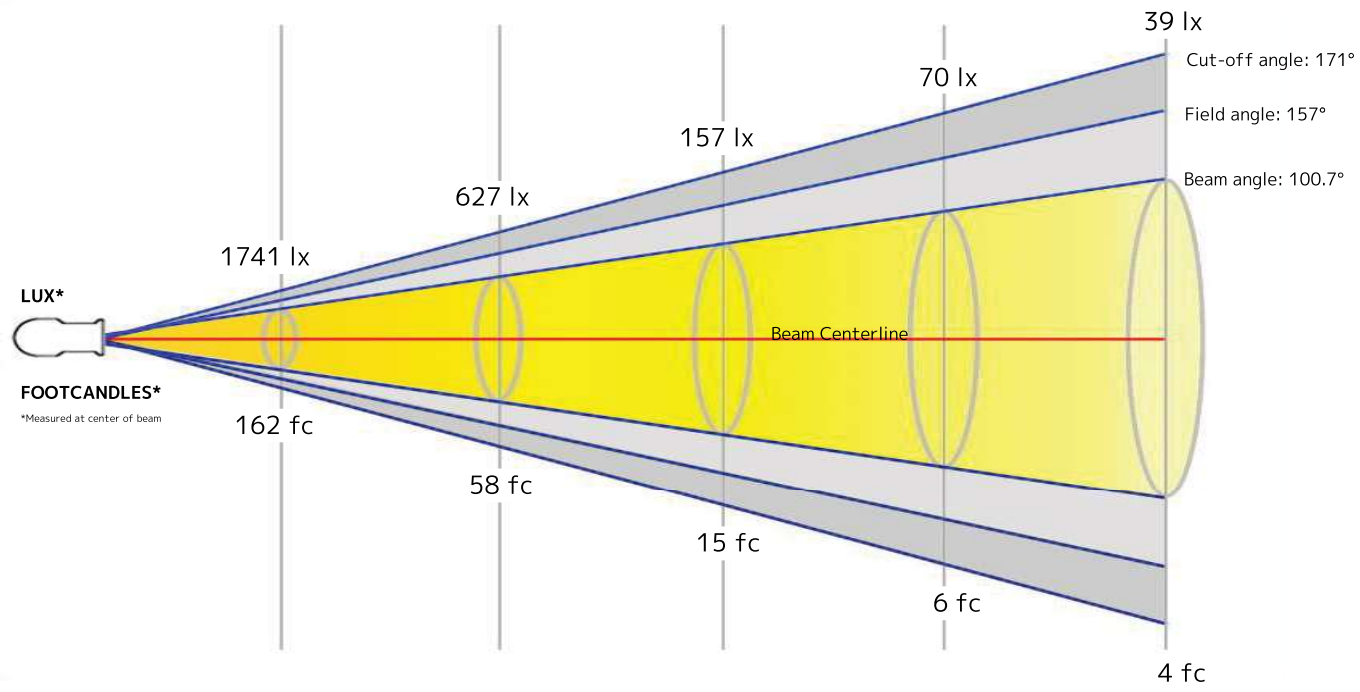
Power: 516 W

Supply Voltage: 120 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	7.2 m	12.1 m	24.1	36.2 m	48.3 m



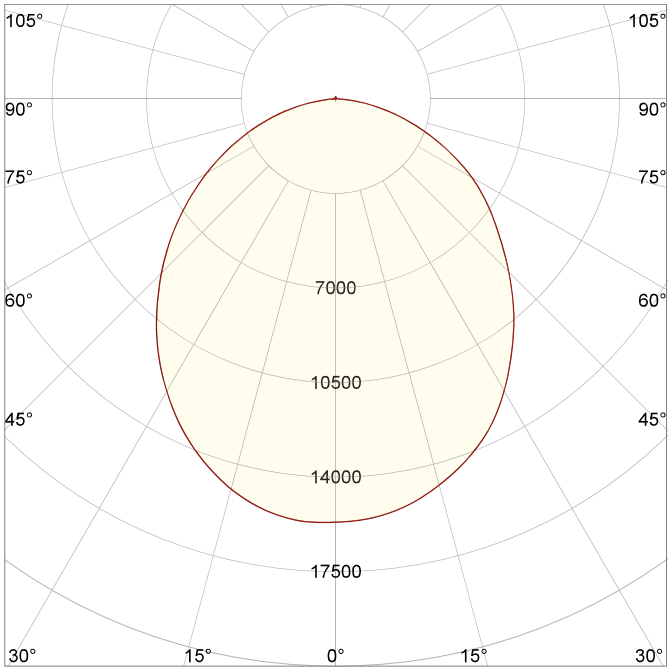
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	23.7 ft	39.6 ft	79.2 ft	118.8 ft	158.4 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	15672	3918	1741	979	627	435	320	245	193	157	130	109	93	80	70	61	54	48	43	39
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1455.9	364	161.8	91	58.2	40.4	29.7	22.7	18	14.6	12	10.1	8.6	7.4	6.5	5.7	5	4.5	4	3.6

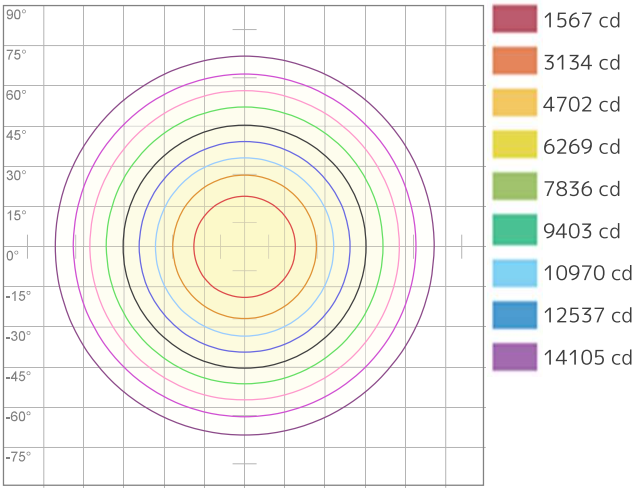
Measurement Date: 9/25/2023

Angular Distribution



Beam Angle - 50%
100.7°
Field Angle - 10%
157°
Cutoff Angle - 2.5%
171°

ISO Diagrams

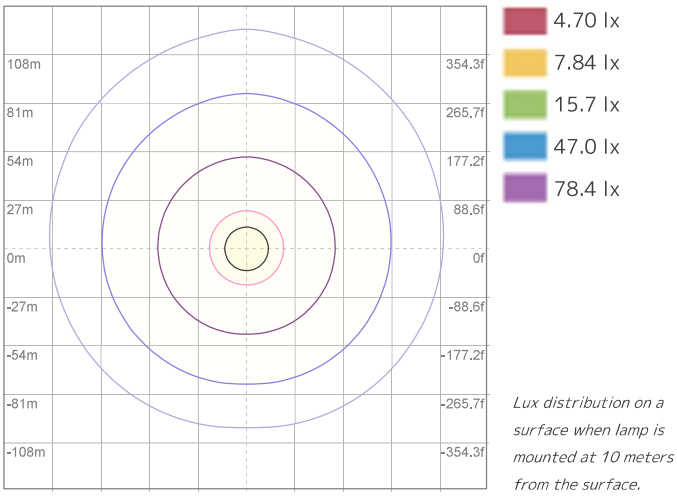


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 15672 cd



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

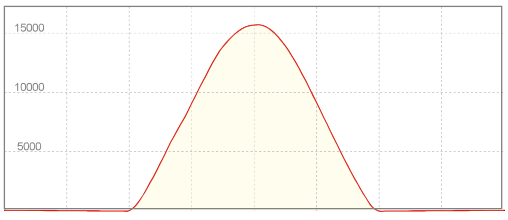
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 157 lx

Linear Distribution



Peak Candela

15675 cd

Calculate Center Beam Intensities

lux = 15675 / distance(m)^2

fc = 15675 / distance(ft)^2

Measurement Date: 9/25/2023

KL Panel XL IP (4500K)

Key Measurements

Output

Total Lumen Output: 38596 lm

Peak Intensity: 15210 cd

Beam

Beam Angle (50%): 101°

Field Angle (10%): 157.3°

Cutoff Angle (2.5%): 171.7°

Color

Color Temperature: 4476 K

CRI: 92.0

TLCI: 88

TM30 R_F: 90.7

TM30 R_g: 106.3

Power Details

Efficacy: n/a Lumen/Watt

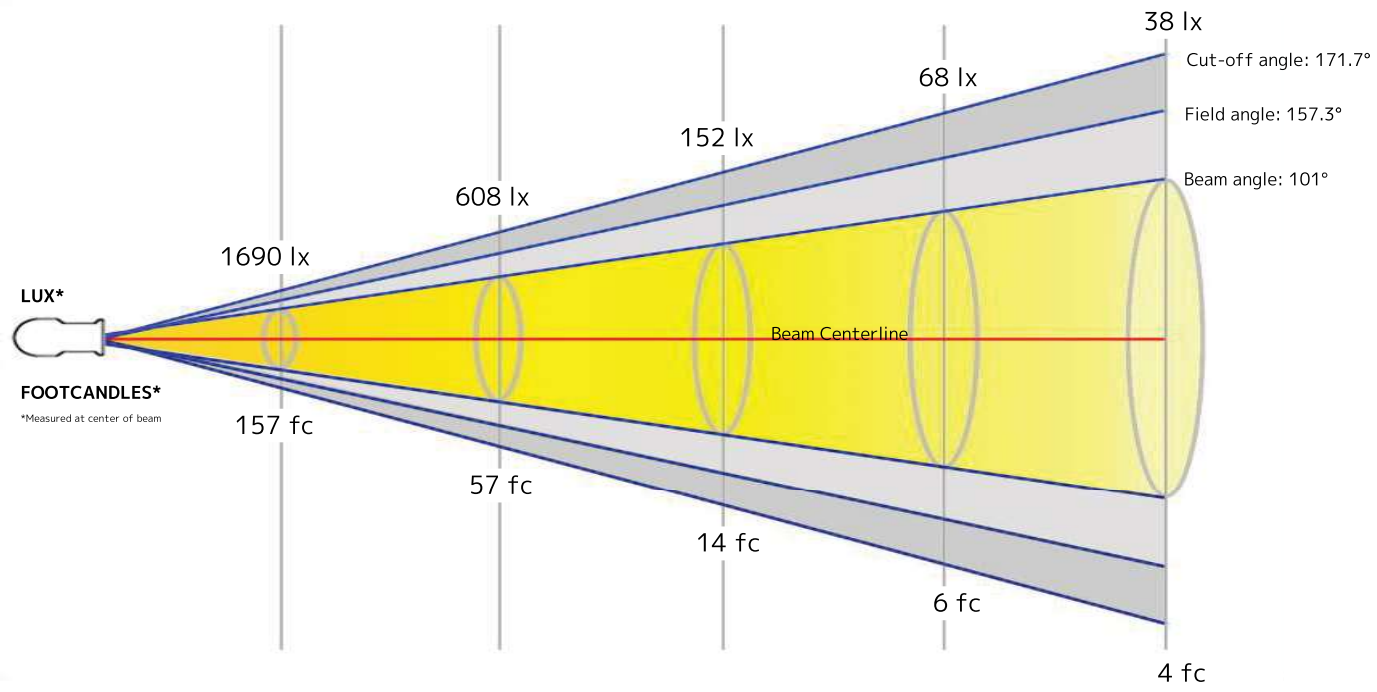
Power: 0.00 W

Supply Voltage: 120 V

Current: 0.000 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	7.3 m	12.1 m	24.3	36.4 m	48.5 m



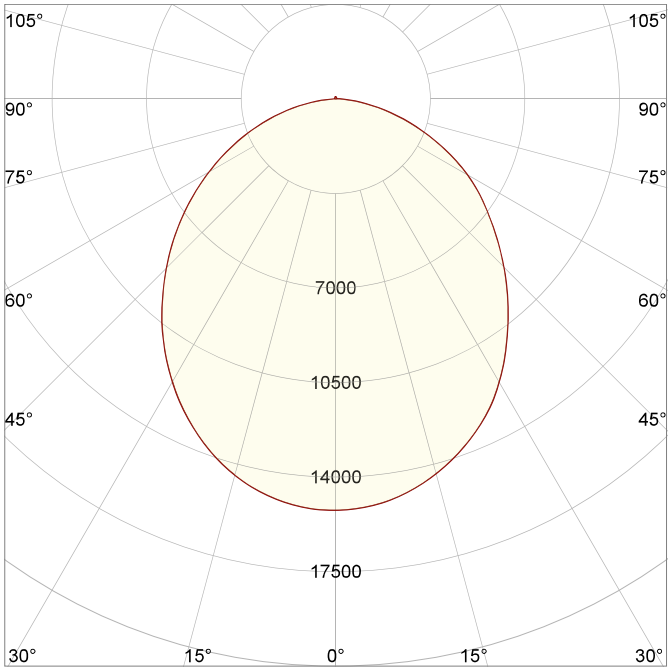
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	23.8 ft	39.8 ft	79.6 ft	119.4 ft	159.2 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	15210	3802	1690	951	608	422	310	238	188	152	126	106	90	78	68	59	53	47	42	38
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1413.1	353.3	157	88.3	56.5	39.3	28.8	22.1	17.4	14.1	11.7	9.8	8.4	7.2	6.3	5.5	4.9	4.4	3.9	3.5

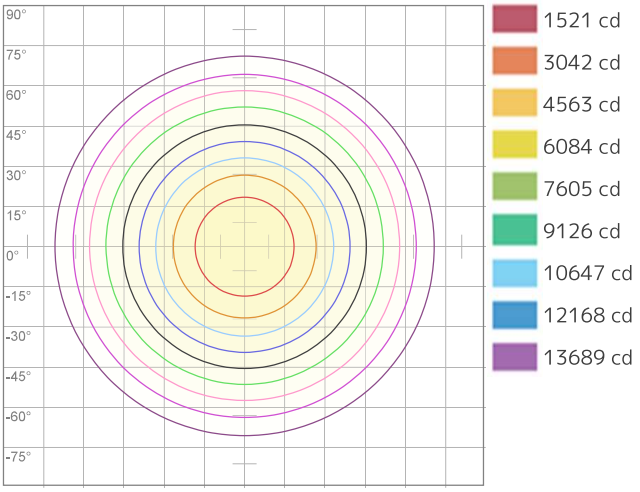
Measurement Date: 9/25/2023

Angular Distribution



Beam Angle - 50%
101°
Field Angle - 10%
157.3°
Cutoff Angle - 2.5%
171.7°

ISO Diagrams

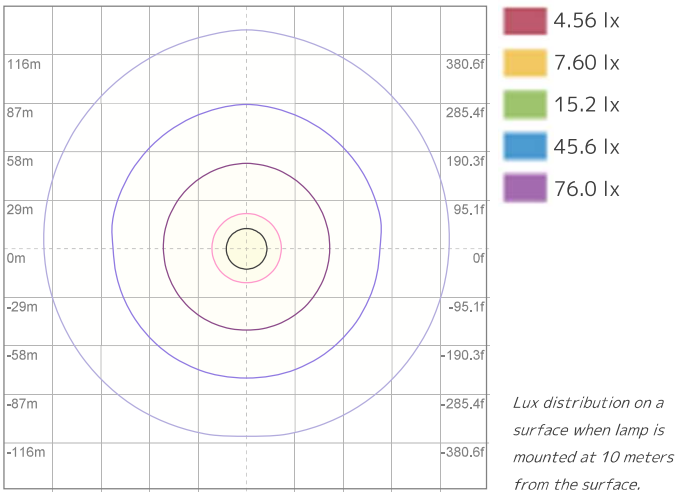


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 15210 cd



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

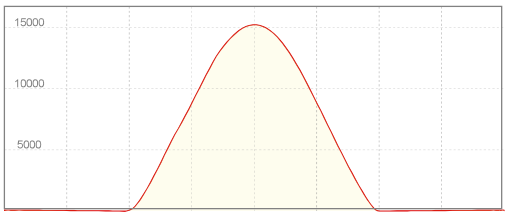
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 152 lx

Linear Distribution



Peak Candela
15210 cd

Calculate Center Beam Intensities

lux = 15210 / distance(m)^2

fc = 15210 / distance(ft)^2

Measurement Date: 9/25/2023

KL Panel XL IP (5600K)

Key Measurements

Output

Total Lumen Output: 37884 lm

Peak Intensity: 14929 cd

Beam

Beam Angle (50%): 101.1°

Field Angle (10%): 157.3°

Cutoff Angle (2.5%): 171.8°

Color

Color Temperature: 5635 K

CRI: 91.6

TLCI: 90

TM30 R_F: 89.7

TM30 R_g: 105.9

Power Details

Efficacy: 73 Lumen/Watt

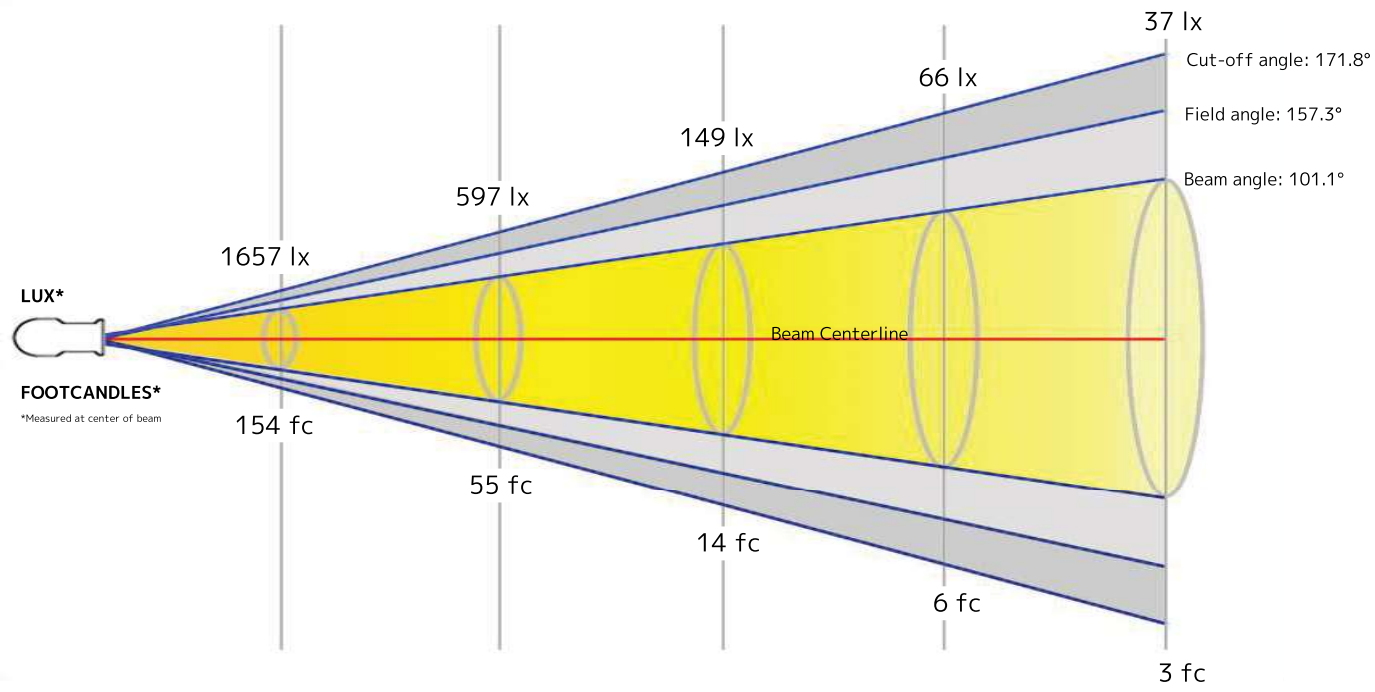
Power: 517 W

Supply Voltage: 120 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	7.3 m	12.2 m	24.3	36.5 m	48.6 m



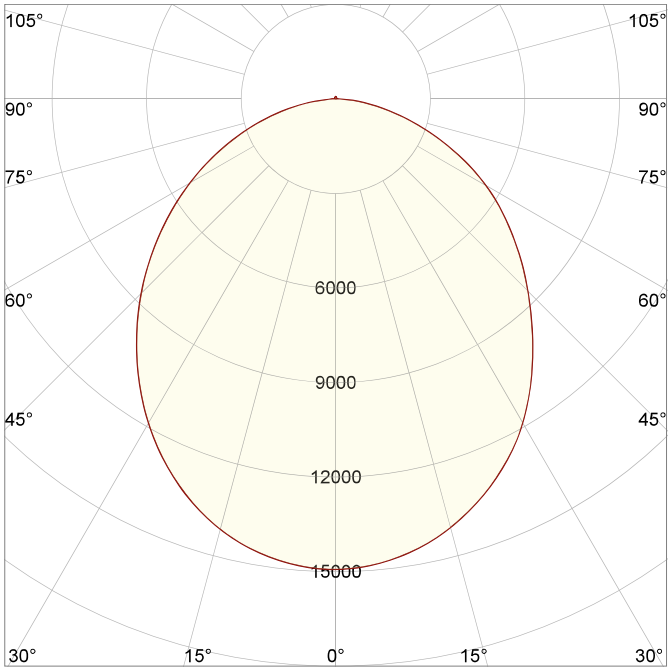
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	23.8 ft	39.9 ft	79.8 ft	119.6 ft	159.5 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	14913	3728	1657	932	597	414	304	233	184	149	123	104	88	76	66	58	52	46	41	37
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1385.4	346.4	153.9	86.6	55.4	38.5	28.3	21.6	17.1	13.9	11.4	9.6	8.2	7.1	6.2	5.4	4.8	4.3	3.8	3.5

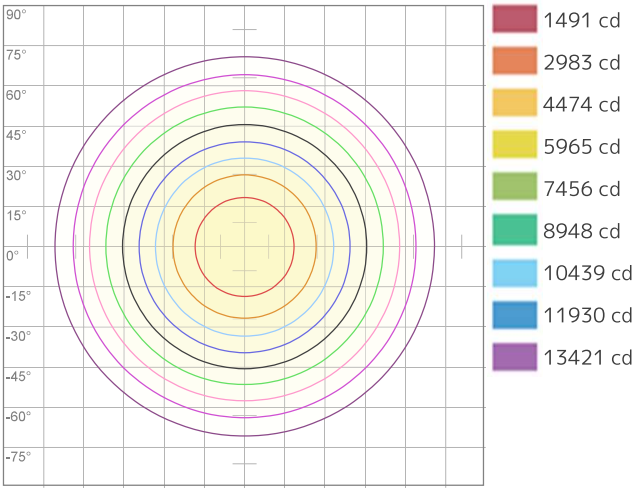
Measurement Date: 9/25/2023

Angular Distribution



Beam Angle - 50%
101.1°
Field Angle - 10%
157.3°
Cutoff Angle - 2.5%
171.8°

ISO Diagrams

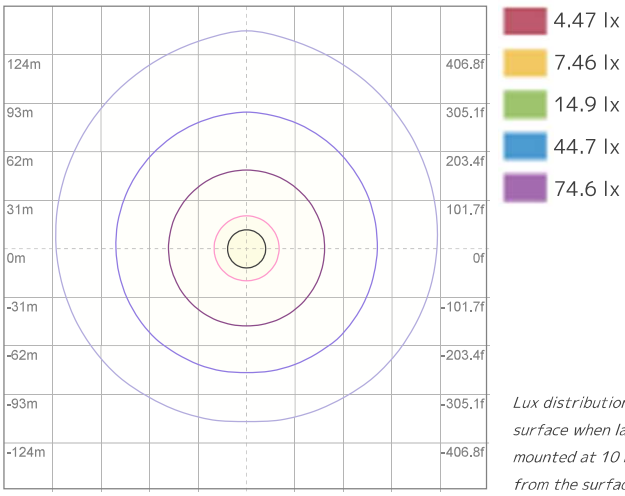


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 14913 cd



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

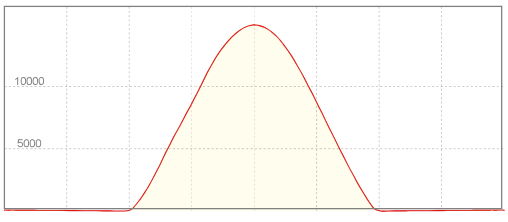
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 149 lx

Linear Distribution



Peak Candela
14929 cd

Calculate Center Beam Intensities

lux = 14929 / distance(m)^2

fc = 14929 / distance(ft)^2

Measurement Date: 9/25/2023

KL Panel XL IP (6000K)

Key Measurements

Output

Total Lumen Output: 37557 lm

Peak Intensity: 14764 cd

Beam

Beam Angle (50%): 101.1°

Field Angle (10%): 157.5°

Cutoff Angle (2.5%): 171.7°

Color

Color Temperature: 6047 K

CRI: 91.2

TLCI: 89

TM30 R_F: 89.3

TM30 R_g: 106.2

Power Details

Efficacy: 68 Lumen/Watt

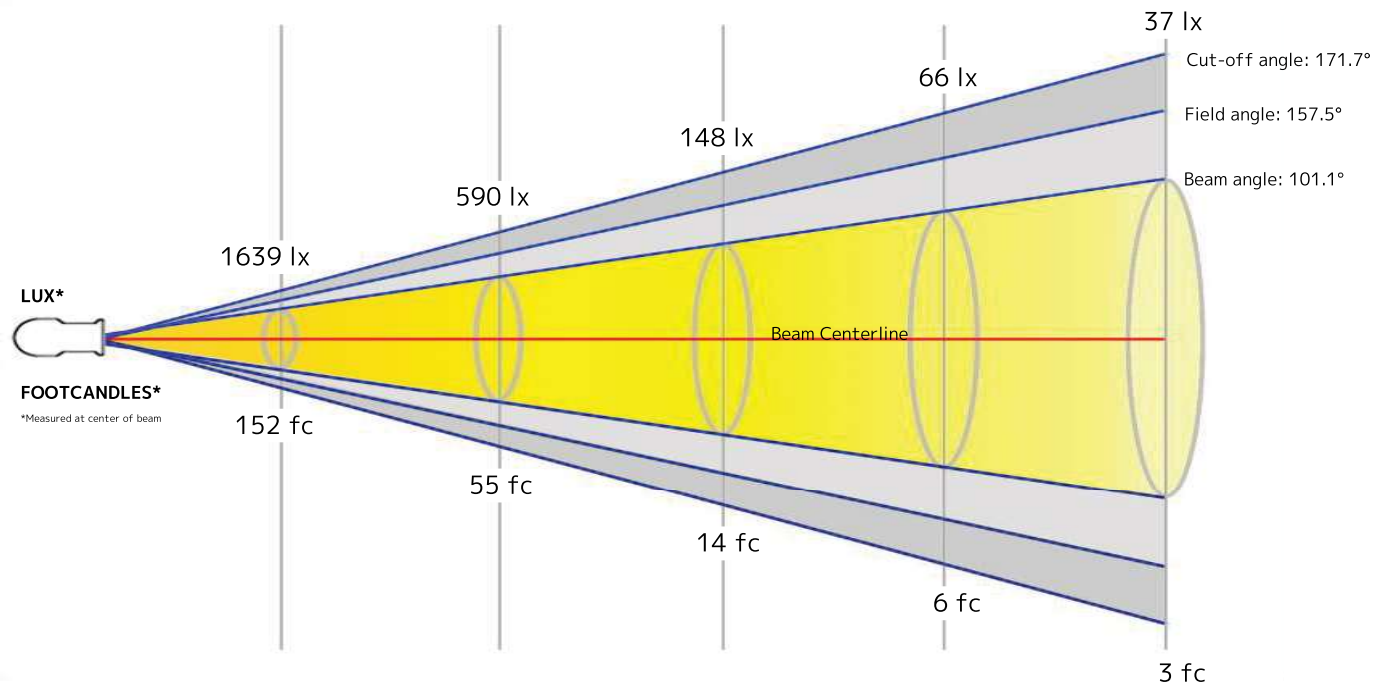
Power: 553 W

Supply Voltage: 120 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	7.3 m	12.1 m	24.3	36.4 m	48.6 m



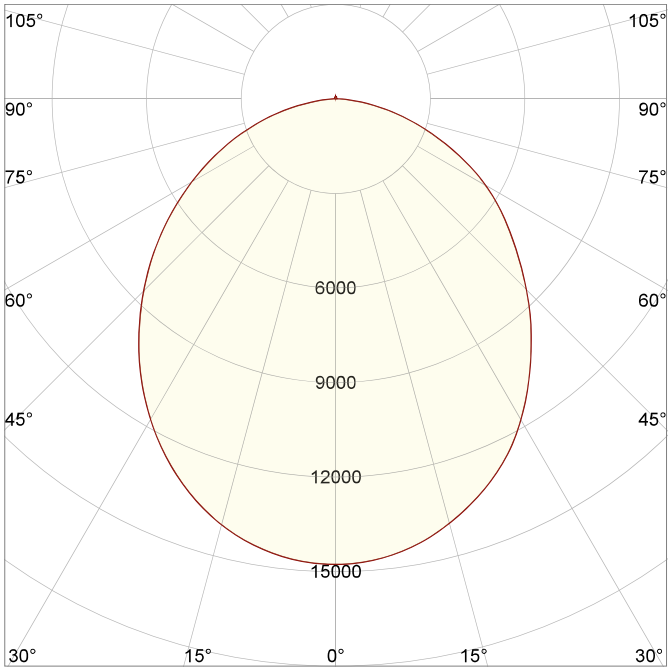
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	23.8 ft	39.8 ft	79.7 ft	119.5 ft	159.4 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	14755	3689	1639	922	590	410	301	231	182	148	122	102	87	75	66	58	51	46	41	37
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1370.8	342.7	152.3	85.7	54.8	38.1	28	21.4	16.9	13.7	11.3	9.5	8.1	7	6.1	5.4	4.7	4.2	3.8	3.4

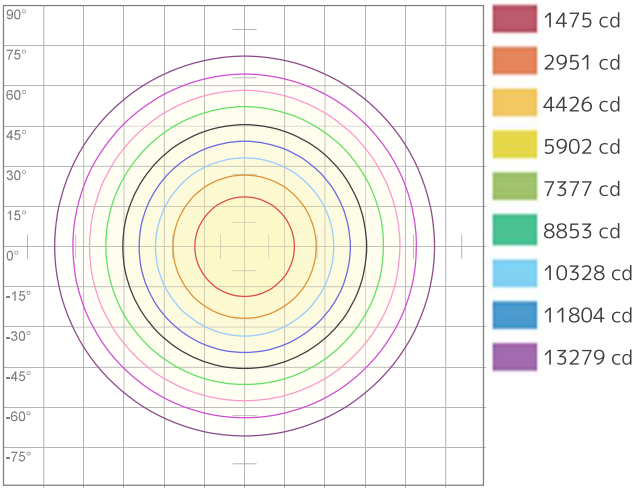
Measurement Date: 9/26/2023

Angular Distribution



Beam Angle - 50%
101.1°
Field Angle - 10%
157.5°
Cutoff Angle - 2.5%
171.7°

ISO Diagrams

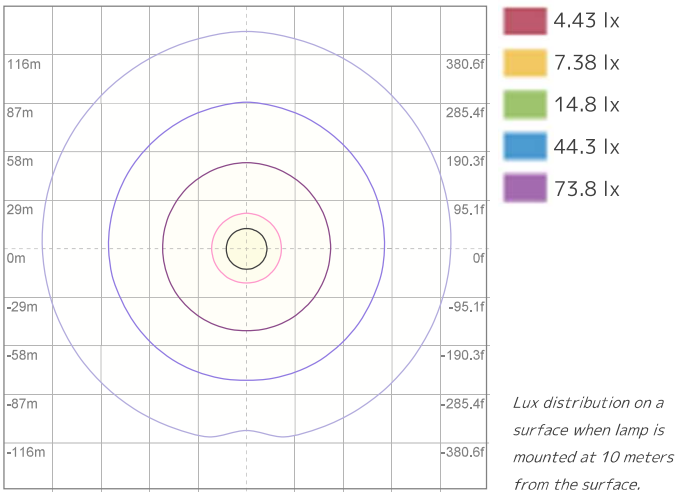


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 14755 cd



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

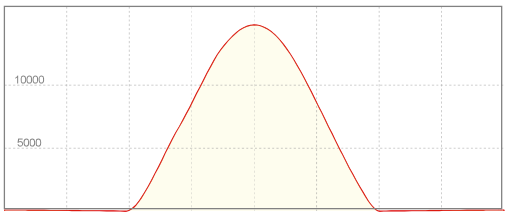
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 148 lx

Linear Distribution



Peak Candela
14764 cd

Calculate Center Beam Intensities
lux = 14764 / distance(m)^2
fc = 14764 / distance(ft)^2

Measurement Date: 9/26/2023

Key Measurements

Output

Total Lumen Output: 36885 lm

Peak Intensity: 14492 cd

Beam

Beam Angle (50%): 101.2°

Field Angle (10%): 157.4°

Cutoff Angle (2.5%): 171.9°

Color

Color Temperature: 6518 K

CRI: 92.9

TLCI: 93

TM30 R_F: 90.6

TM30 R_g: 104.6

Power Details

Efficacy: 66 Lumen/Watt

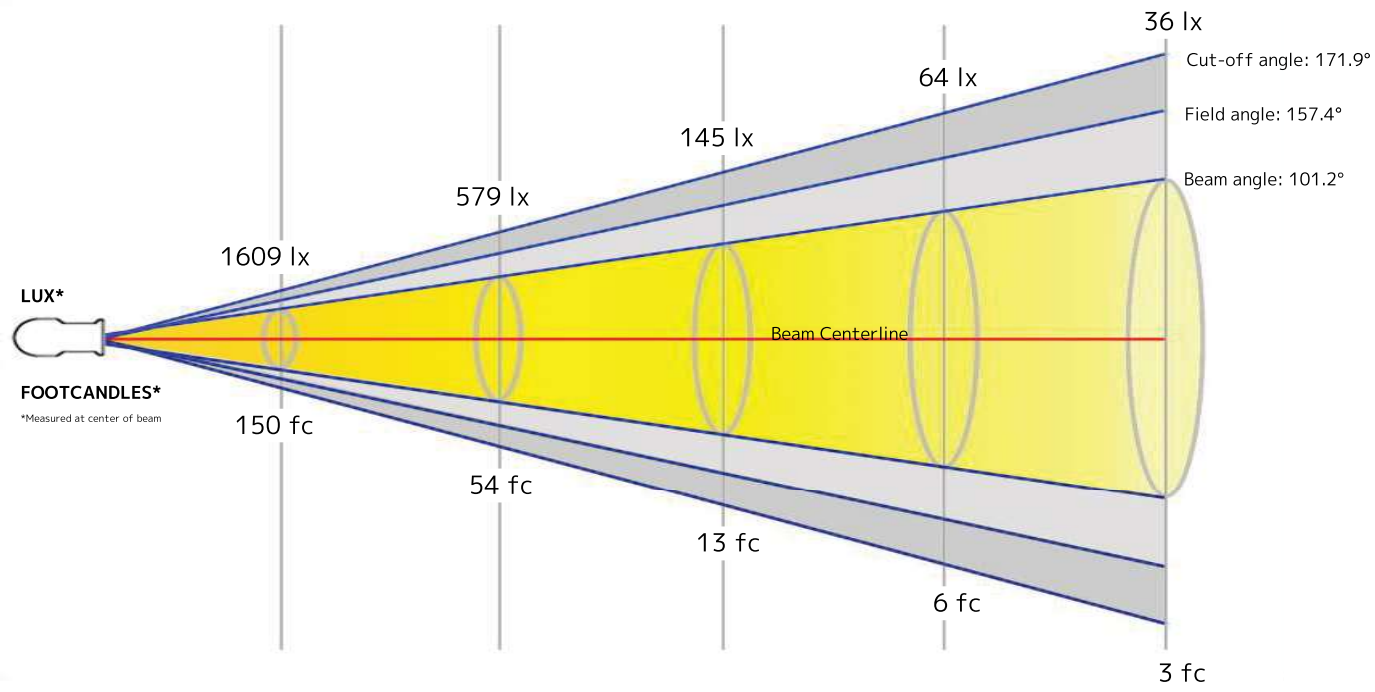
Power: 556 W

Supply Voltage: 120 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	7.3 m	12.2 m	24.3	36.5 m	48.7 m



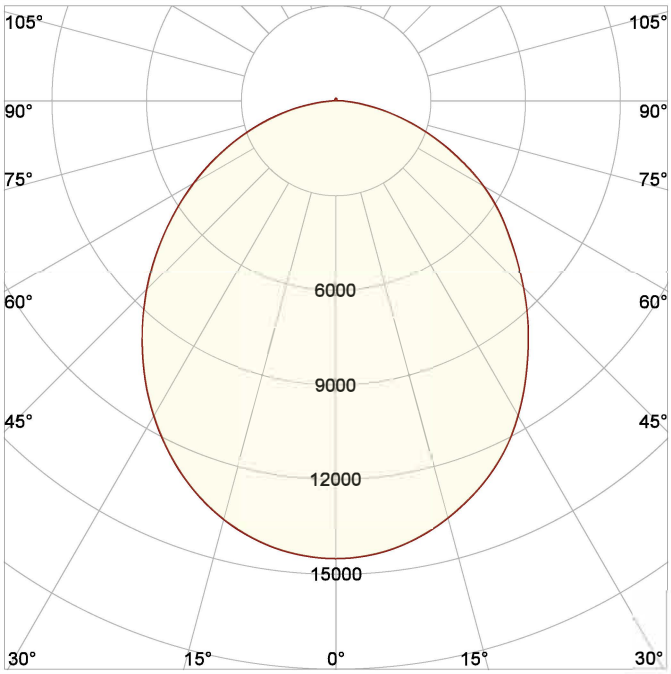
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	23.9 ft	39.9 ft	79.8 ft	119.8 ft	159.7 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	14484	3621	1609	905	579	402	296	226	179	145	120	101	86	74	64	57	50	45	40	36
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1345.6	336.4	149.5	84.1	53.8	37.4	27.5	21	16.6	13.5	11.1	9.3	8	6.9	6	5.3	4.7	4.2	3.7	3.4

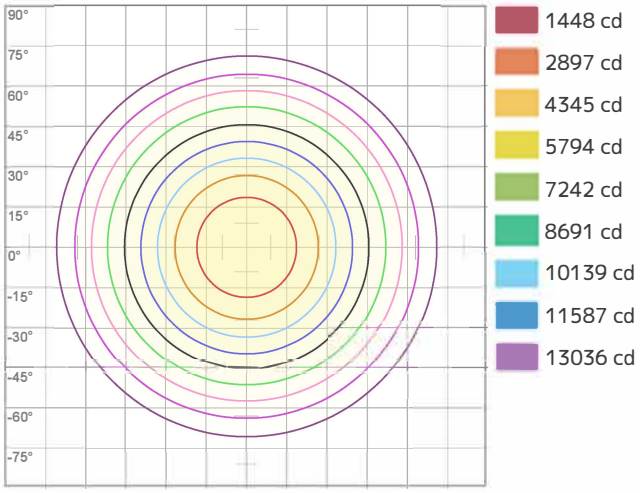
Measurement Date: 9/26/2023

Angular Distribution



Beam Angle - 50%
101.2°
Field Angle - 10%
157.4°
Cutoff Angle - 2.5%
171.9°

ISO Diagrams

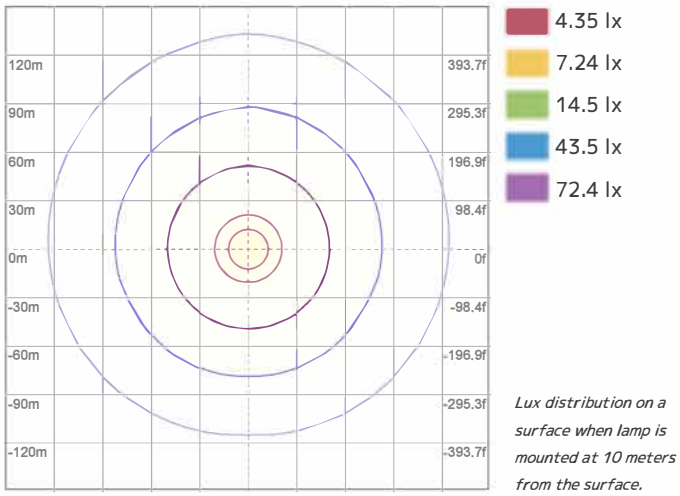


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 14484 cd



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

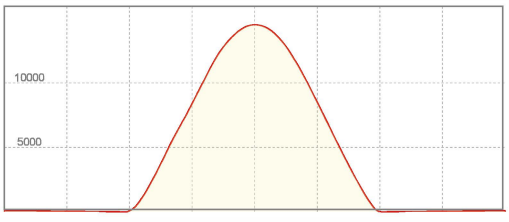
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 145 lx

Linear Distribution



Peak Candela

14492 cd

Calculate Center Beam Intensities

lux = 14492 / distance(m)^2

fc = 14492 / distance(ft)^2

Measurement Date: 9/26/2023

Key Measurements

Output

Total Lumen Output: 34047 lm

Peak Intensity: 13367 cd

Beam

Beam Angle (50%): 101.1°

Field Angle (10%): 157.4°

Cutoff Angle (2.5%): 171.7°

Color

Color Temperature: 8527 K

CRI: 93.7

TLCI: 95

TM30 R_F: 89.5

TM30 R_g: 99.7

Power Details

Efficacy: 62 Lumen/Watt

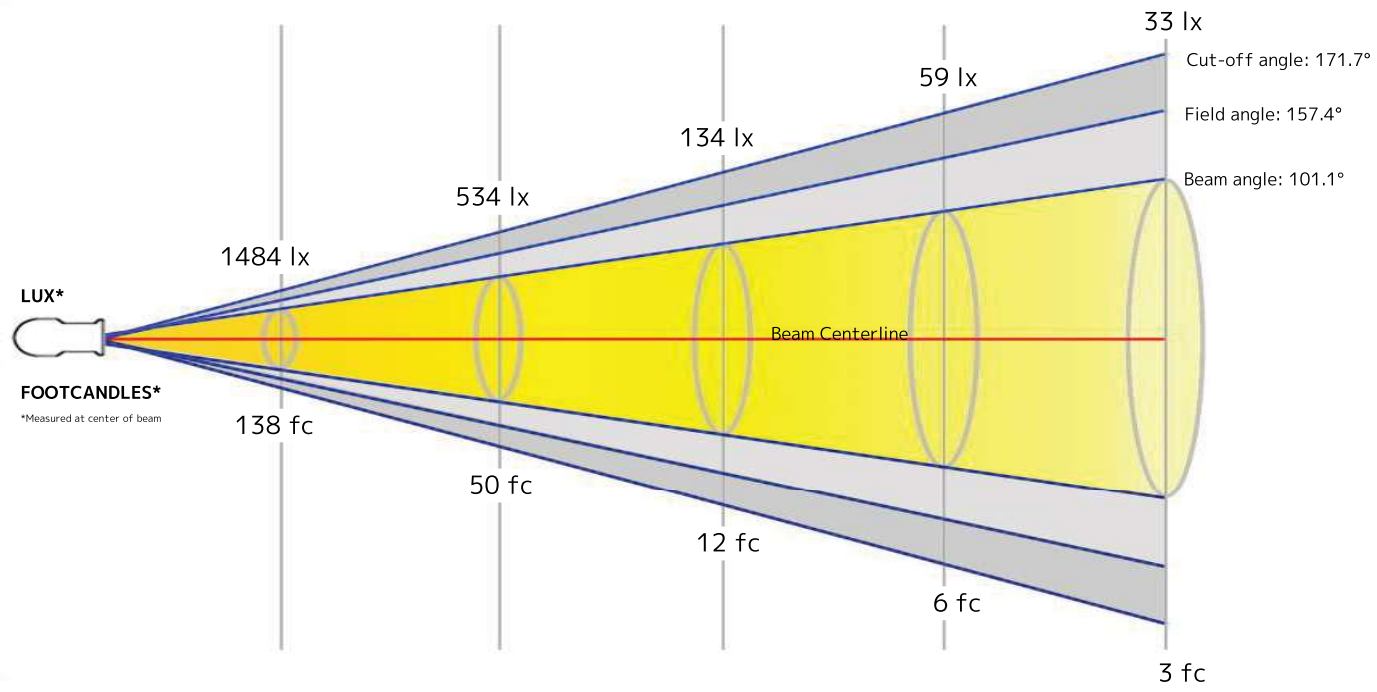
Power: 547 W

Supply Voltage: 119 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	7.3 m	12.2 m	24.3	36.5 m	48.6 m



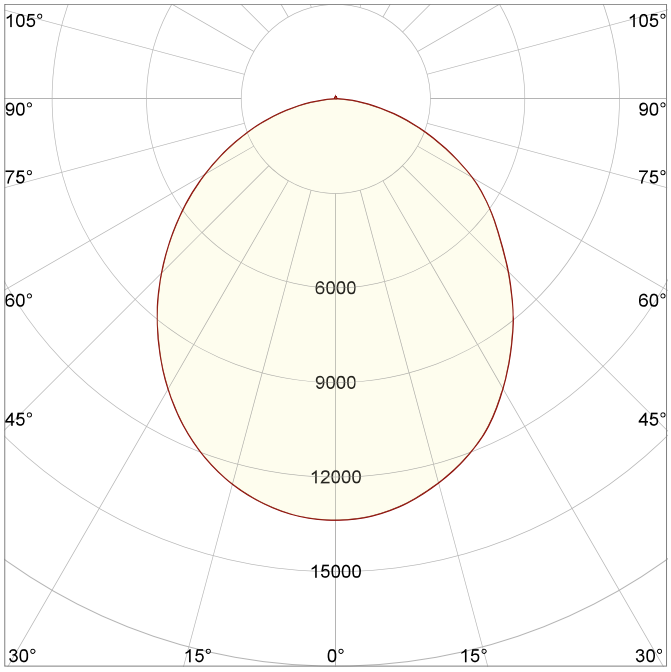
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	23.8 ft	39.9 ft	79.8 ft	119.6 ft	159.5 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	13359	3340	1484	835	534	371	273	209	165	134	110	93	79	68	59	52	46	41	37	33
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1241.1	310.3	137.9	77.6	49.6	34.5	25.3	19.4	15.3	12.4	10.3	8.6	7.3	6.3	5.5	4.8	4.3	3.8	3.4	3.1

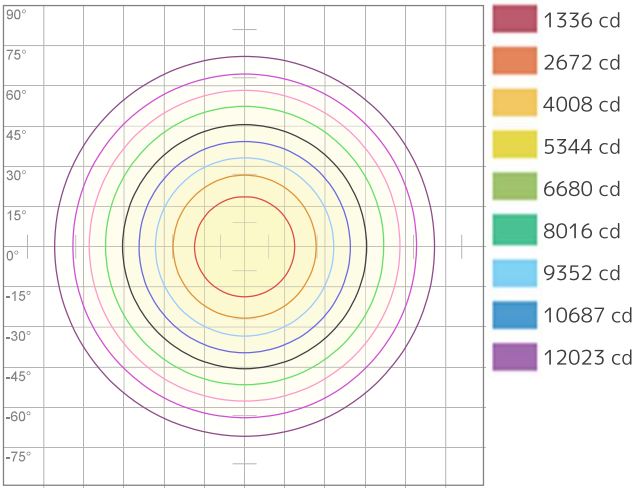
Measurement Date: 9/26/2023

Angular Distribution



Beam Angle - 50%
101.1°
Field Angle - 10%
157.4°
Cutoff Angle - 2.5%
171.7°

ISO Diagrams

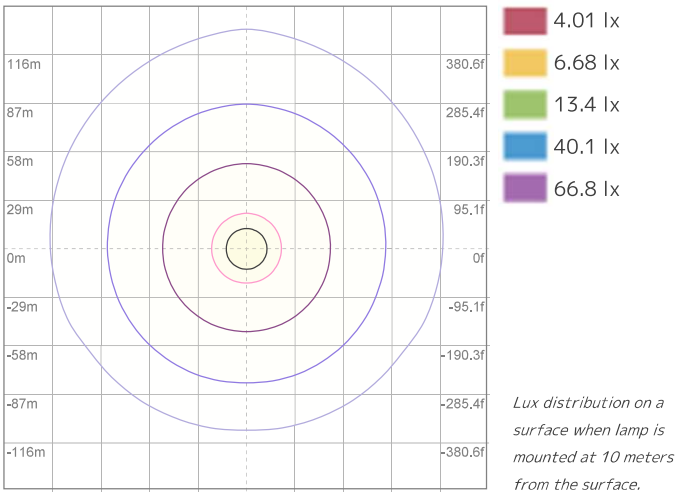


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 13359 cd



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

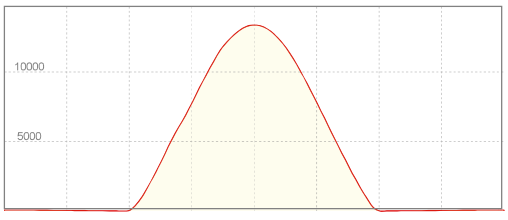
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 134 lx

Linear Distribution



Peak Candela

13367 cd

Calculate Center Beam Intensities

lux = 13367 / distance(m)^2

fc = 13367 / distance(ft)^2

Measurement Date: 9/26/2023

Key Measurements

Output

Total Lumen Output: 33818 lm

Peak Intensity: 13261 cd

Beam

Beam Angle (50%): 101.3°

Field Angle (10%): 157.6°

Cutoff Angle (2.5%): 172.1°

Color

Color Temperature: 9974 K

CRI: 94.6

TLCI: 94

TM30 R_F: 89.2

TM30 R_g: 97.8

Power Details

Efficacy: 61 Lumen/Watt

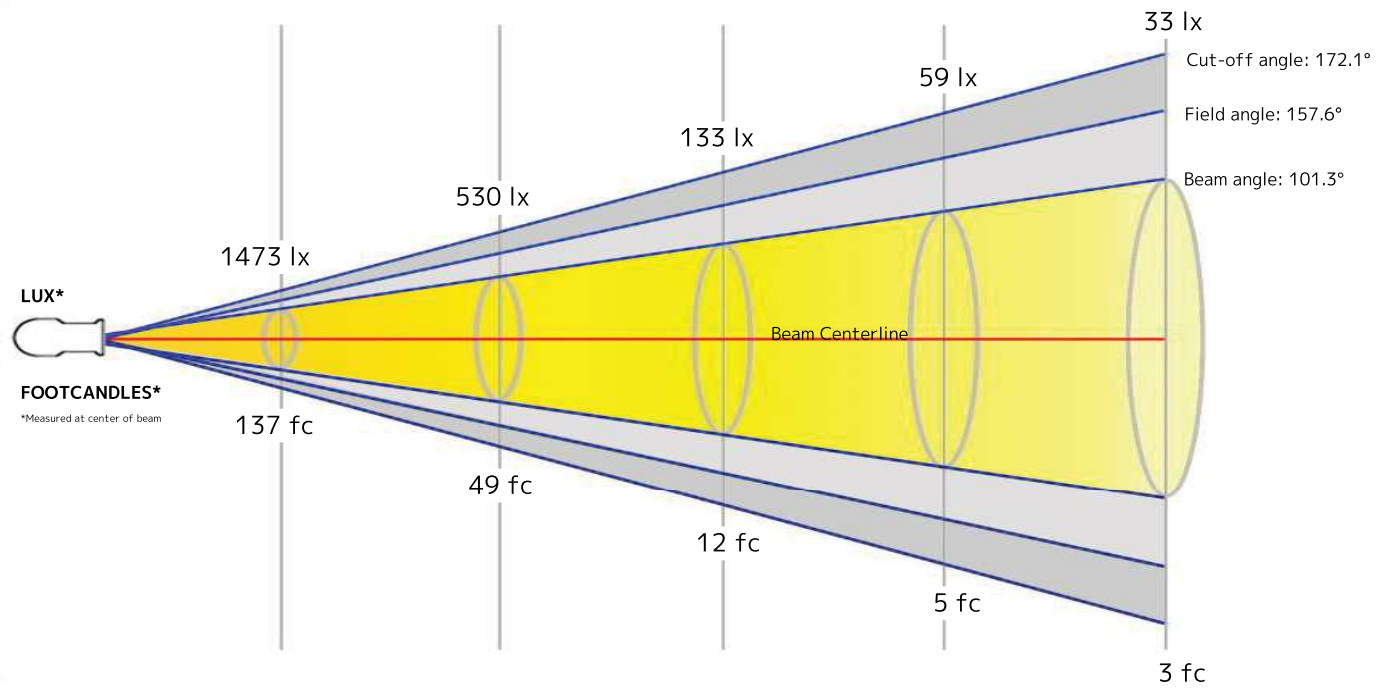
Power: 550 W

Supply Voltage: 120 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	7.3 m	12.2 m	24.4	36.6 m	48.8 m



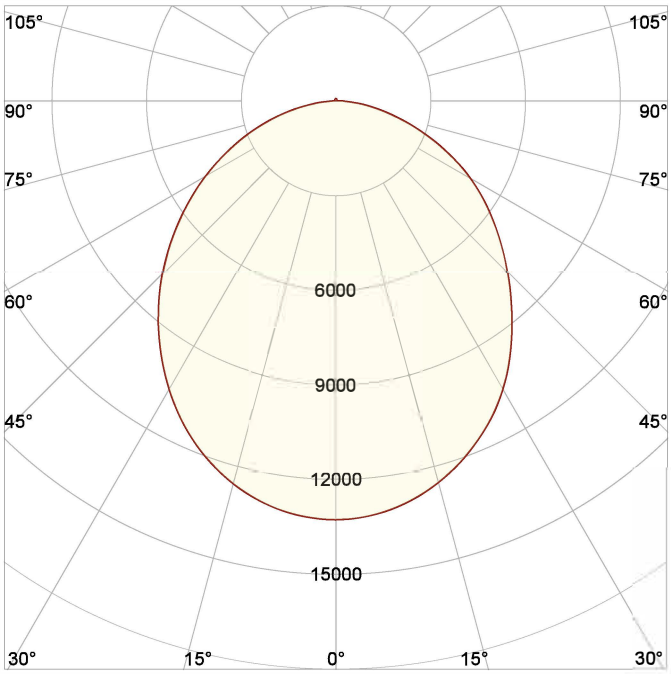
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	23.9 ft	40 ft	80 ft	120 ft	160 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	13255	3314	1473	828	530	368	271	207	164	133	110	92	78	68	59	52	46	41	37	33
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1231.4	307.8	136.8	77	49.3	34.2	25.1	19.2	15.2	12.3	10.2	8.6	7.3	6.3	5.5	4.8	4.3	3.8	3.4	3.1

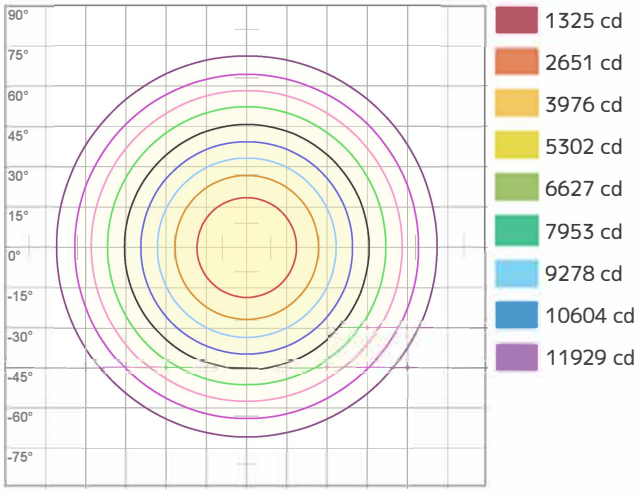
Measurement Date: 9/26/2023

Angular Distribution



Beam Angle - 50%
101.3°
Field Angle - 10%
157.6°
Cutoff Angle - 2.5%
172.1°

ISO Diagrams

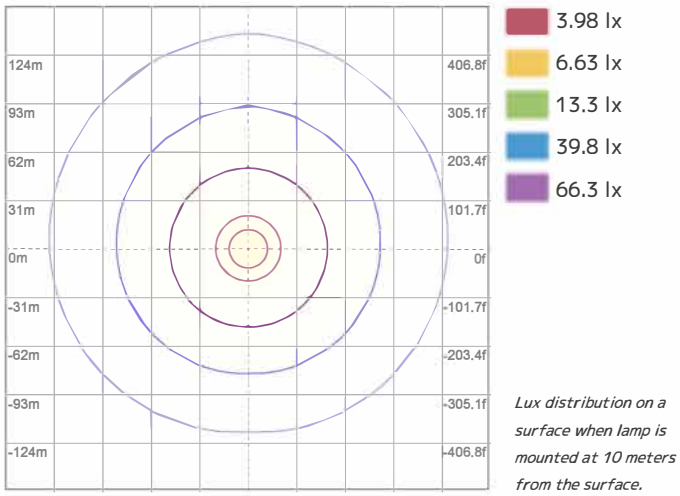


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 13255 cd



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

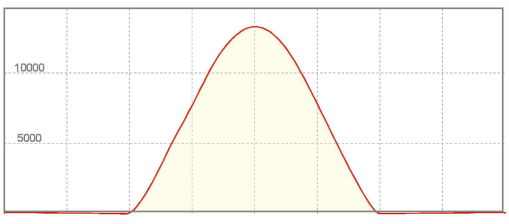
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 133 lx

Linear Distribution



Peak Candela
13261 cd

Calculate Center Beam Intensities

lux = 13261 / distance(m)^2

fc = 13261 / distance(ft)^2

Measurement Date: 9/26/2023

Key Measurements

Output

Total Lumen Output: 22229 lm

Peak Intensity: 17107 cd

Beam

Beam Angle (50%): 62.8°

Field Angle (10%): 115.6°

Cutoff Angle (2.5%): 167.2°

Color

Color Temperature: 15615 K

CRI: 72.9

TLCI: 92

TM30 R_F: 78.6

TM30 R_g: 104.6

Power Details

Efficacy: 41 Lumen/Watt

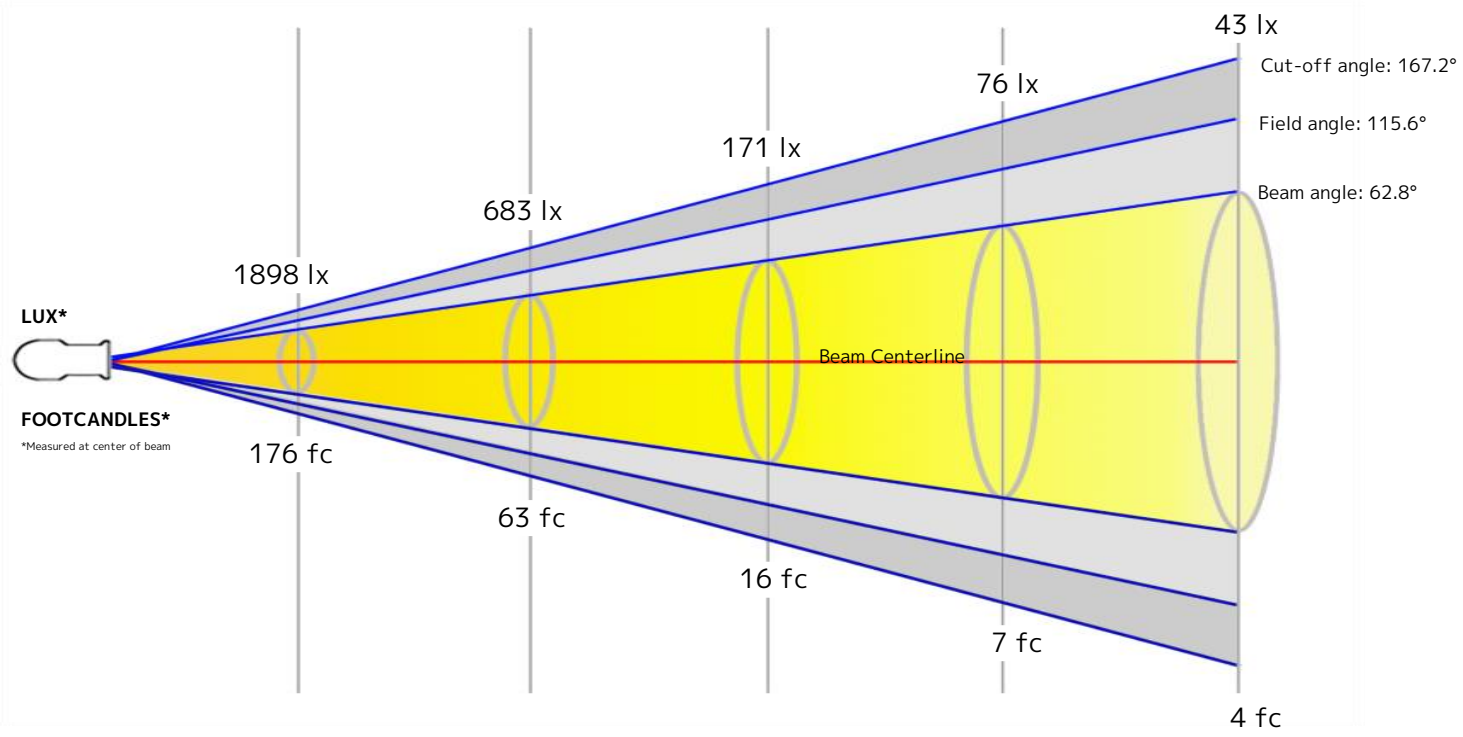
Power: 545 W

Supply Voltage: 118 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	3.7 m	6.1 m	12.2	18.3 m	24.4 m



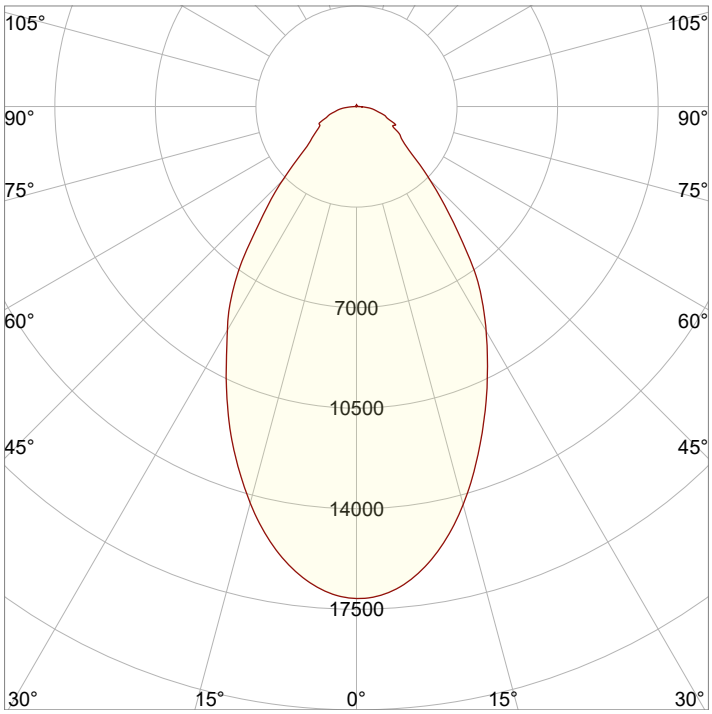
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	12 ft	20 ft	40 ft	60.1 ft	80.1 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	17078	4269	1898	1067	683	474	349	267	211	171	141	119	101	87	76	67	59	53	47	43
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1586.6	396.6	176.3	99.2	63.5	44.1	32.4	24.8	19.6	15.9	13.1	11	9.4	8.1	7.1	6.2	5.5	4.9	4.4	4

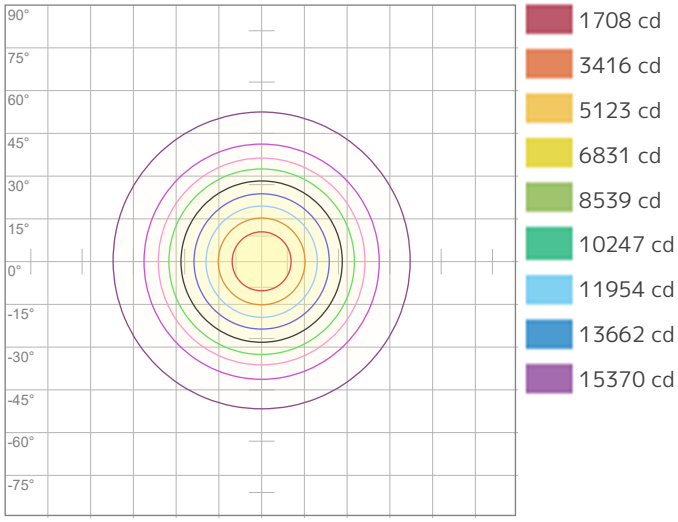
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
62.8°
Field Angle - 10%
115.6°
Cutoff Angle - 2.5%
167.2°

ISO Diagrams

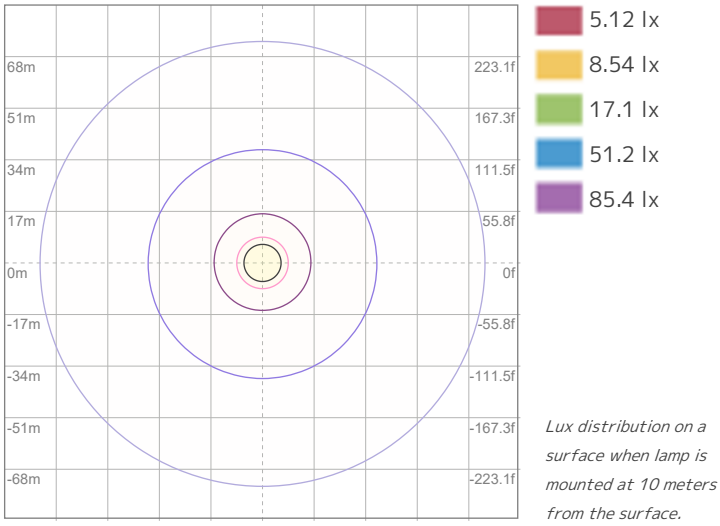


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 17078 cd



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

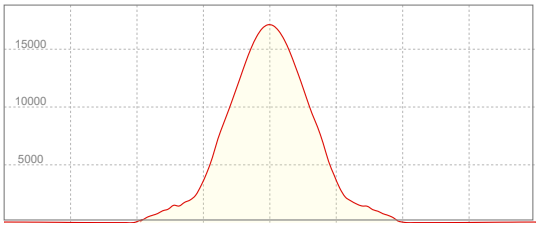
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 171 lx

Linear Distribution



Peak Candela

17107 cd

Calculate Center Beam Intensities

lux = 17107 / distance(m)^2

fc = 17107 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (Intensifier, 2700K)

Key Measurements

Output

Total Lumen Output: 30697 lm

Peak Intensity: 23787 cd

Beam

Beam Angle (50%): 62.4°

Field Angle (10%): 114.7°

Cutoff Angle (2.5%): 166.8°

Color

Color Temperature: 2680 K

CRI: 92.0

TLCI: 81

TM30 R_F: 90.5

TM30 R_g: 106.6

Power Details

Efficacy: 56 Lumen/Watt

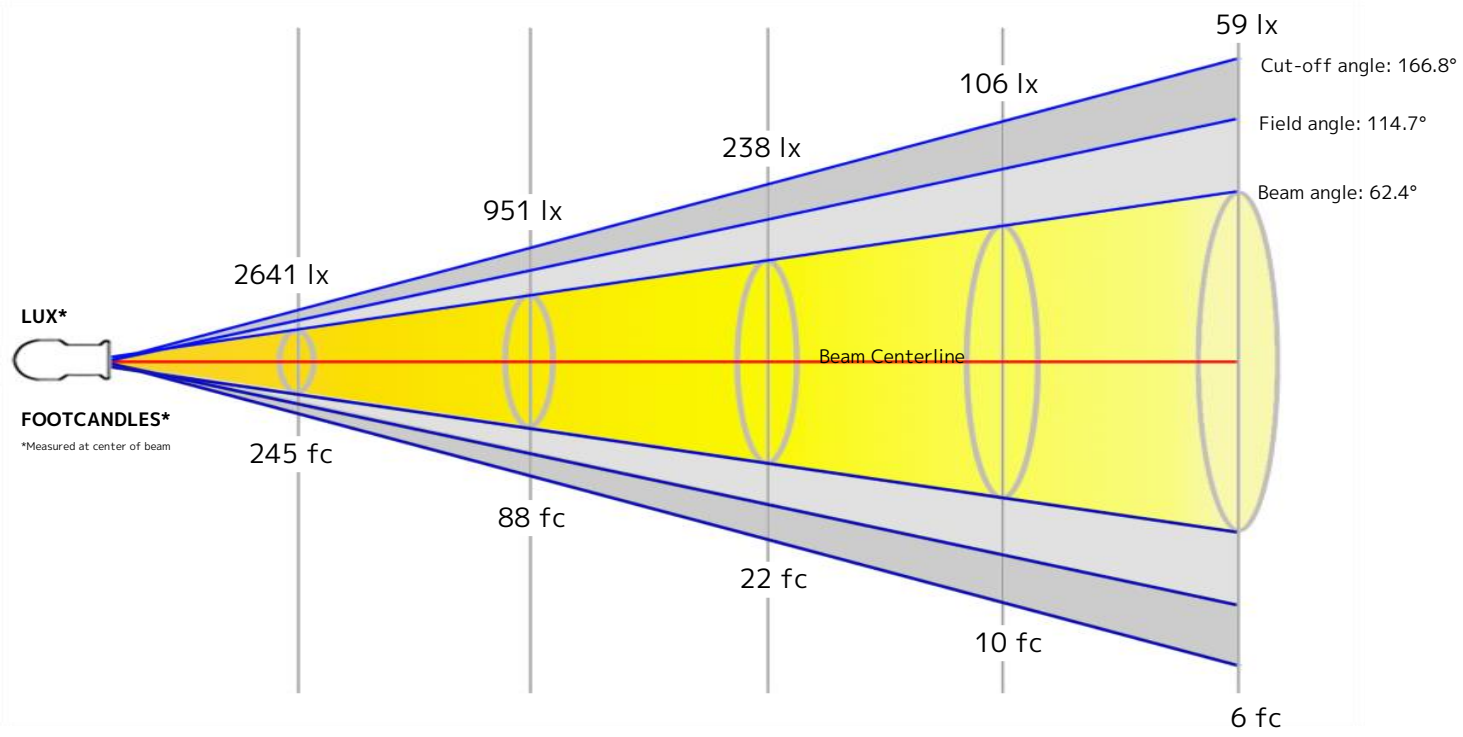
Power: 550 W

Supply Voltage: 119 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	3.6 m	6.1 m	12.1	18.2 m	24.2 m



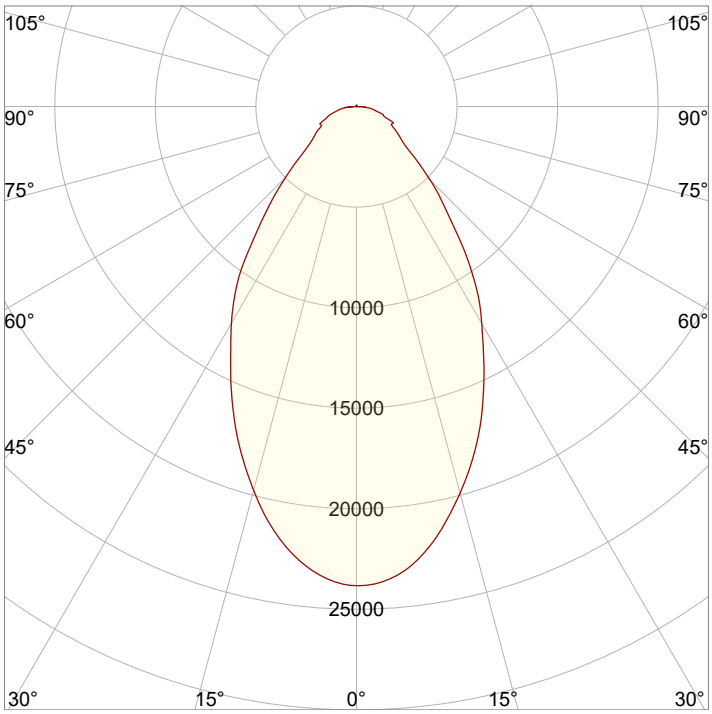
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	11.9 ft	19.9 ft	39.8 ft	59.6 ft	79.5 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	23766	5941	2641	1485	951	660	485	371	293	238	196	165	141	121	106	93	82	73	66	59
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	2207.9	552	245.3	138	88.3	61.3	45.1	34.5	27.3	22.1	18.2	15.3	13.1	11.3	9.8	8.6	7.6	6.8	6.1	5.5

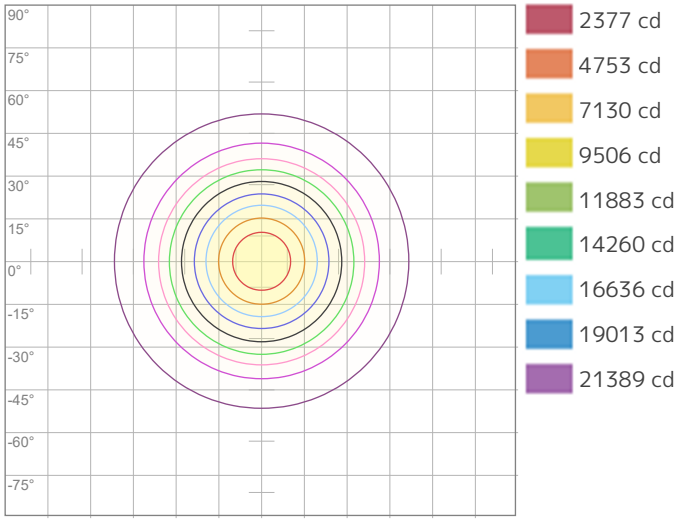
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
62.4°
Field Angle - 10%
114.7°
Cutoff Angle - 2.5%
166.8°

ISO Diagrams

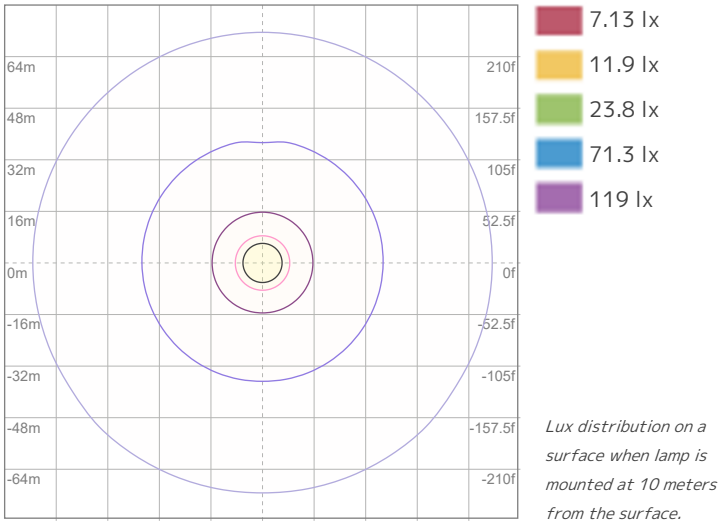


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 23766 cd



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

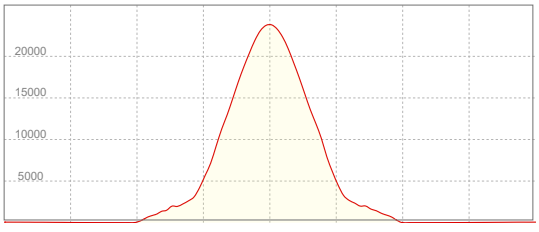
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 238 lx

Linear Distribution



Peak Candela

23787 cd

Calculate Center Beam Intensities

lux = 23787 / distance(m)^2

fc = 23787 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (Intensifier, 3200K)

Key Measurements

Output

Total Lumen Output: 29709 lm

Peak Intensity: 23018 cd

Beam

Beam Angle (50%): 62.6°

Field Angle (10%): 115°

Cutoff Angle (2.5%): 166.7°

Color

Color Temperature: 3219 K

CRI: 90.4

TLCI: 83

TM30 R_F: 90.9

TM30 R_g: 107.5

Power Details

Efficacy: 57 Lumen/Watt

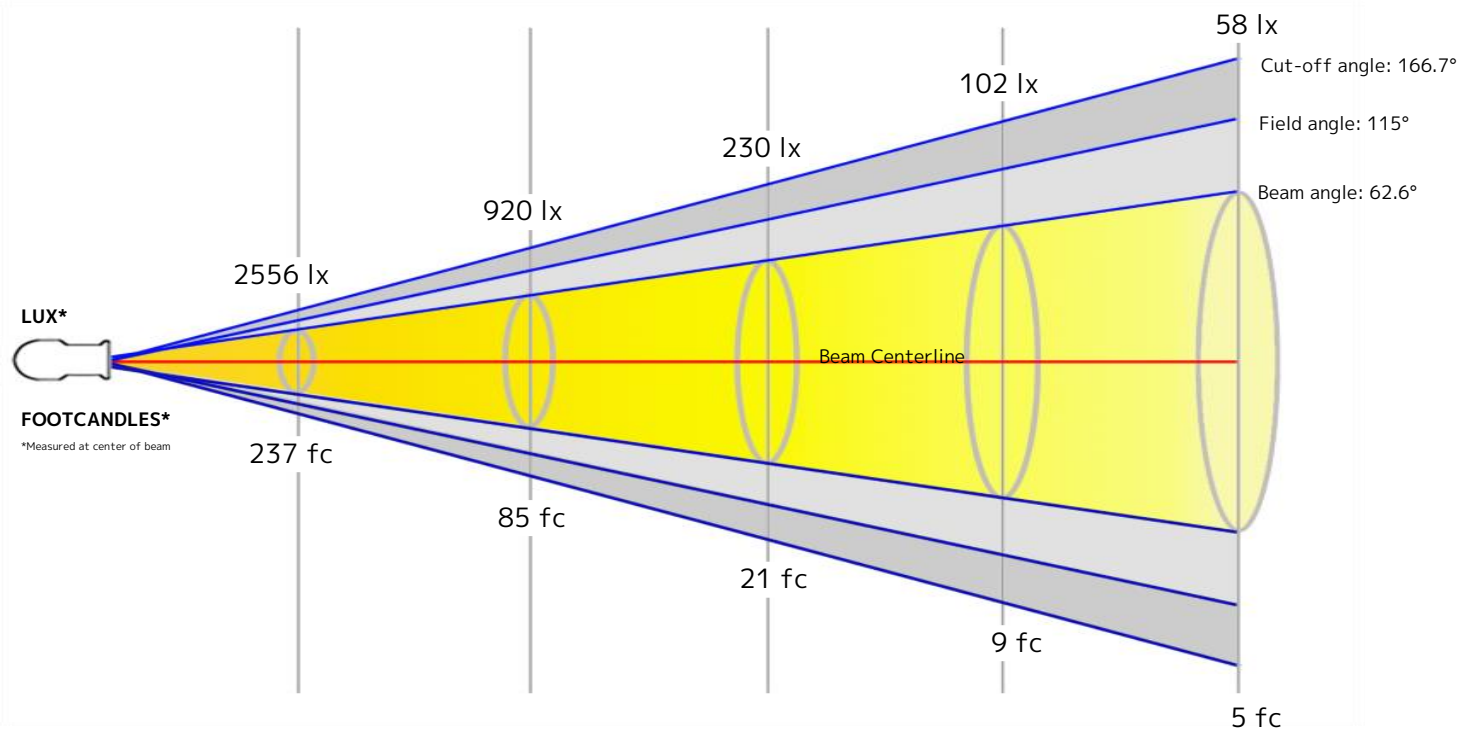
Power: 520 W

Supply Voltage: 119 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	3.6 m	6.1 m	12.2	18.2 m	24.3 m



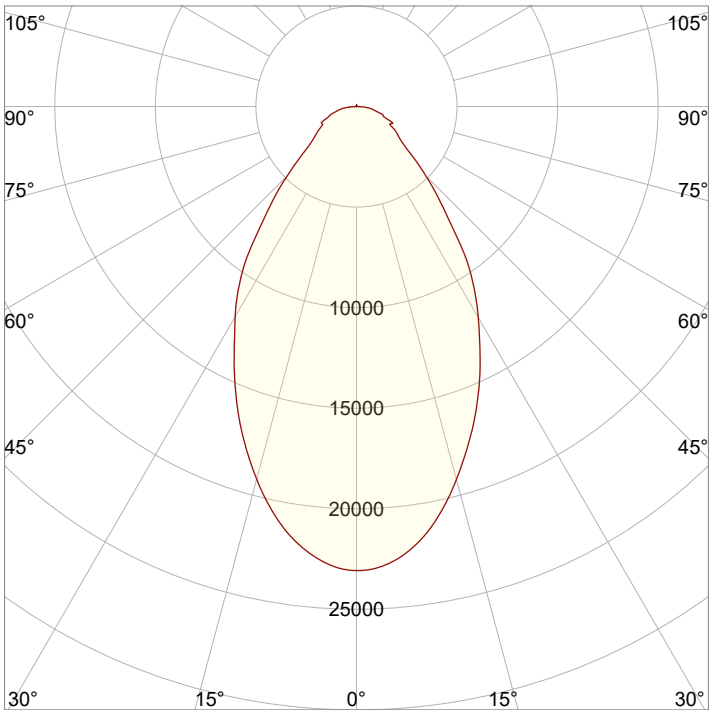
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	11.9 ft	20 ft	39.9 ft	59.9 ft	79.8 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	23007	5752	2556	1438	920	639	470	359	284	230	190	160	136	117	102	90	80	71	64	58
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	2137.4	534.4	237.5	133.6	85.5	59.4	43.6	33.4	26.4	21.4	17.7	14.8	12.6	10.9	9.5	8.3	7.4	6.6	5.9	5.3

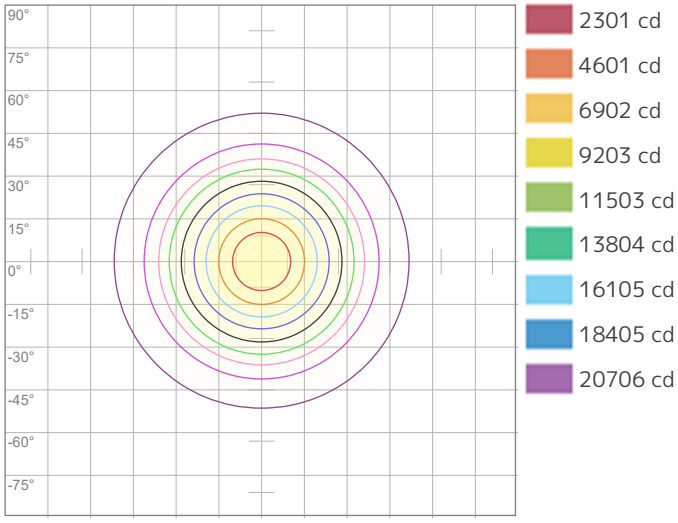
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
62.6°
Field Angle - 10%
115°
Cutoff Angle - 2.5%
166.7°

ISO Diagrams

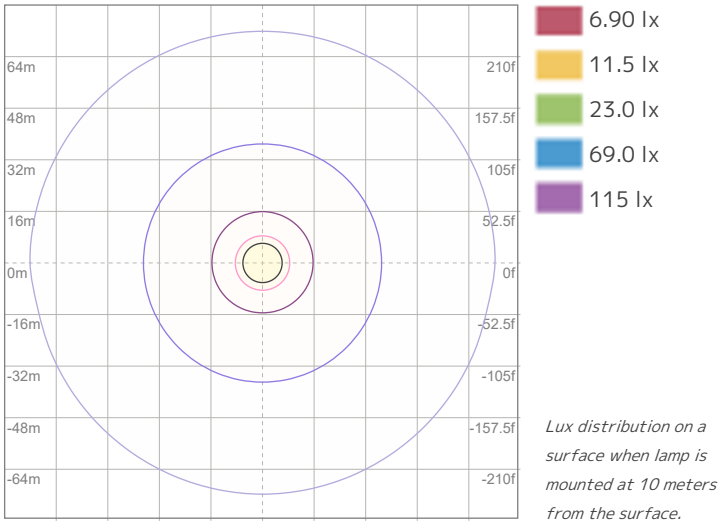


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 23007 cd



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

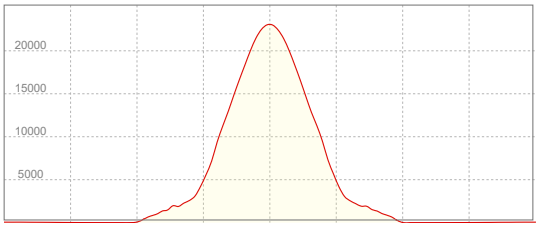
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 230 lx

Linear Distribution



Peak Candela

23018 cd

Calculate Center Beam Intensities

lux = 23018 / distance(m)^2

fc = 23018 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (Intensifier, 4500K)

Key Measurements

Output

Total Lumen Output: 28924 lm

Peak Intensity: 22265 cd

Beam

Beam Angle (50%): 62.8°

Field Angle (10%): 115.6°

Cutoff Angle (2.5%): 167.1°

Color

Color Temperature: 4470 K

CRI: 92.0

TLCI: 88

TM30 R_F: 90.8

TM30 R_g: 106.2

Power Details

Efficacy: 56 Lumen/Watt

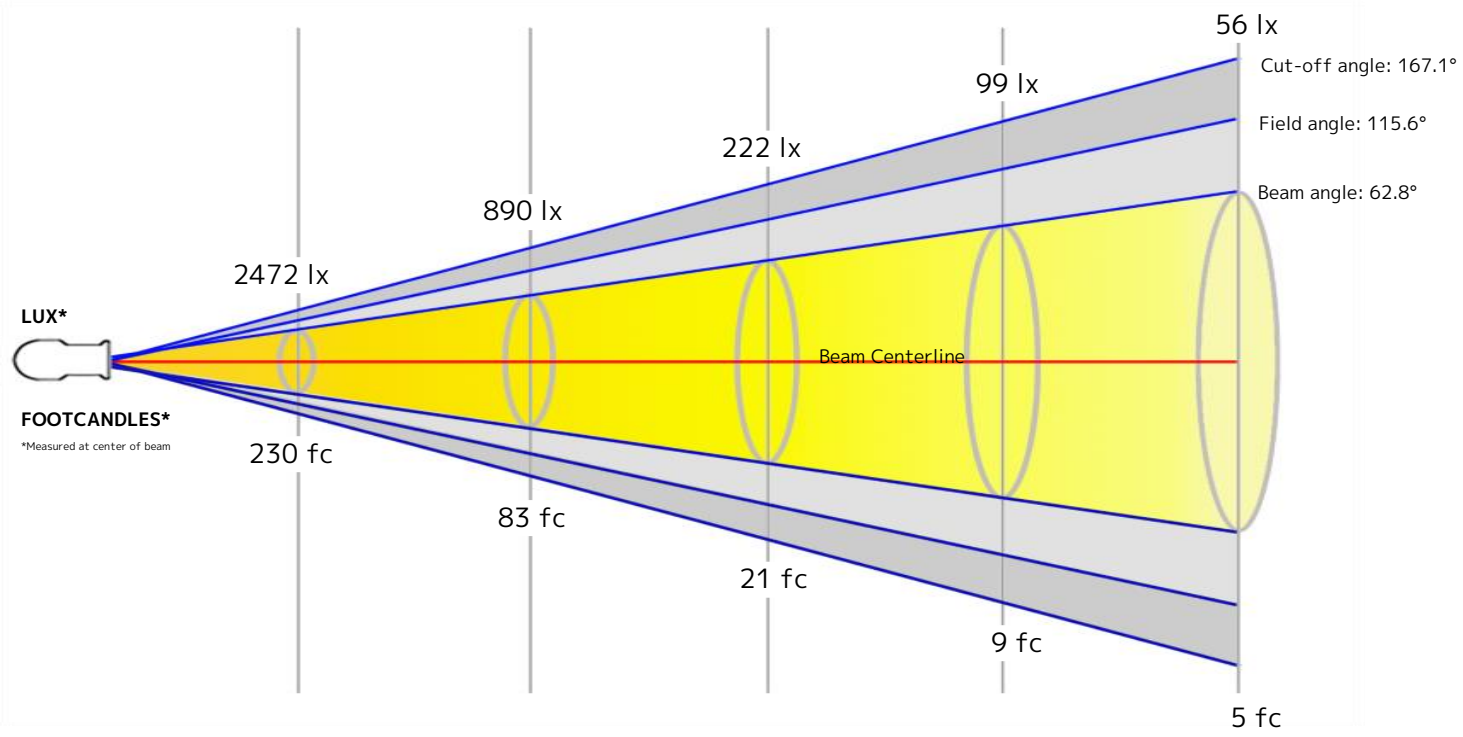
Power: 516 W

Supply Voltage: 119 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	3.7 m	6.1 m	12.2	18.3 m	24.4 m



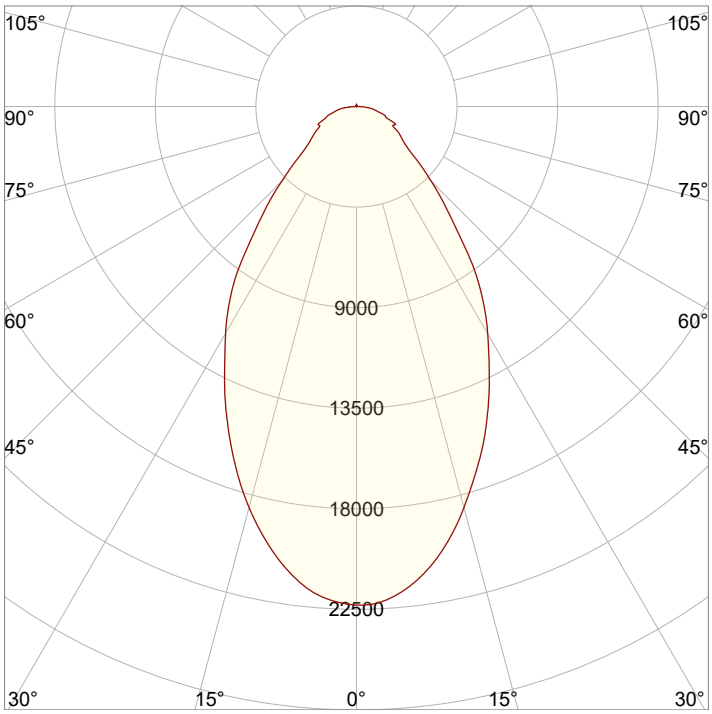
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	12 ft	20 ft	40 ft	60.1 ft	80.1 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	22247	5562	2472	1390	890	618	454	348	275	222	184	154	132	114	99	87	77	69	62	56
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	2066.8	516.7	229.6	129.2	82.7	57.4	42.2	32.3	25.5	20.7	17.1	14.4	12.2	10.5	9.2	8.1	7.2	6.4	5.7	5.2

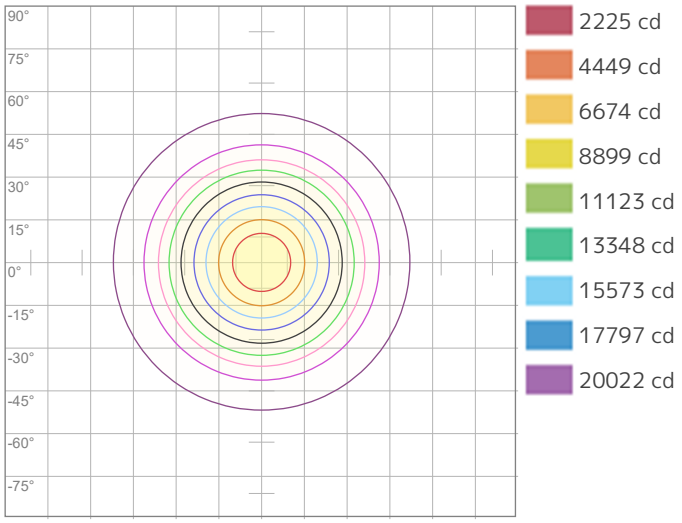
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
62.8°
Field Angle - 10%
115.6°
Cutoff Angle - 2.5%
167.1°

ISO Diagrams

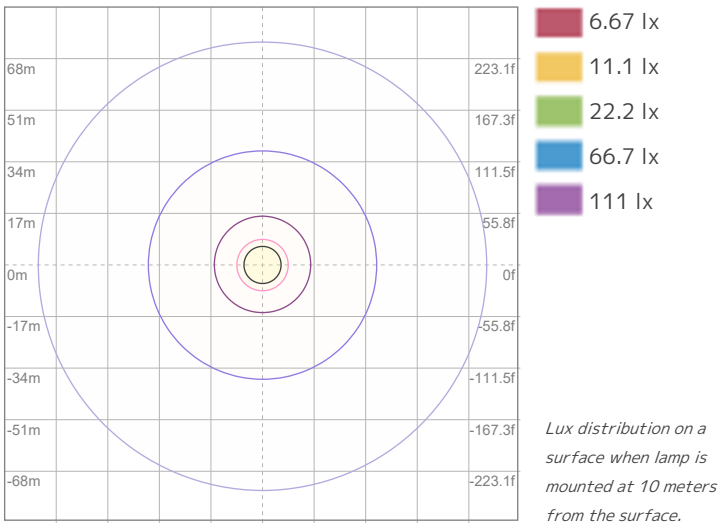


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 22247 cd



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

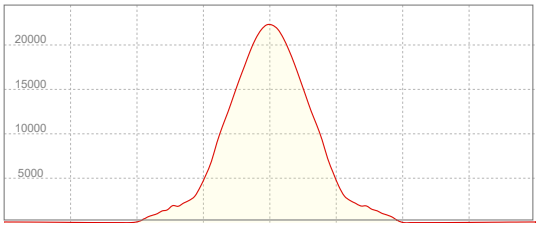
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 222 lx

Linear Distribution



Peak Candela

22265 cd

Calculate Center Beam Intensities

lux = 22265 / distance(m)^2

fc = 22265 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (Intensifier, 5600K)

Prepared For ELATION PROFESSIONAL

Key Measurements

Output

Total Lumen Output: 27790 lm

Peak Intensity: 21501 cd

Beam

Beam Angle (50%): 62.6°

Field Angle (10%): 115.5°

Cutoff Angle (2.5%): 167.2°

Color

Color Temperature: 5580 K

CRI: 91.6

TLCI: 90

TM30 R_F: 89.9

TM30 R_g: 105.9

Power Details

Efficacy: 53 Lumen/Watt

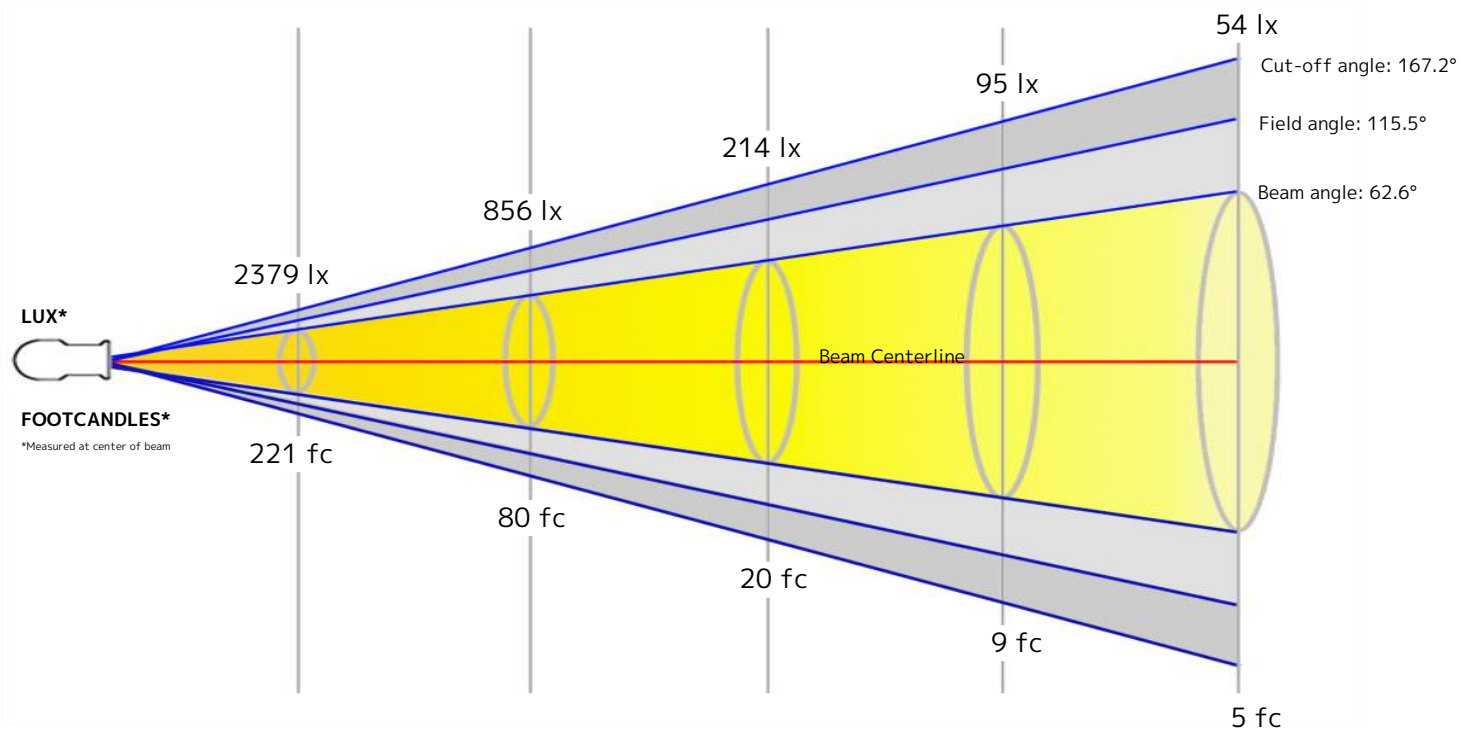
Power: 520 W

Supply Voltage: 118 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	3.6 m	6.1 m	12.2	18.2 m	24.3 m



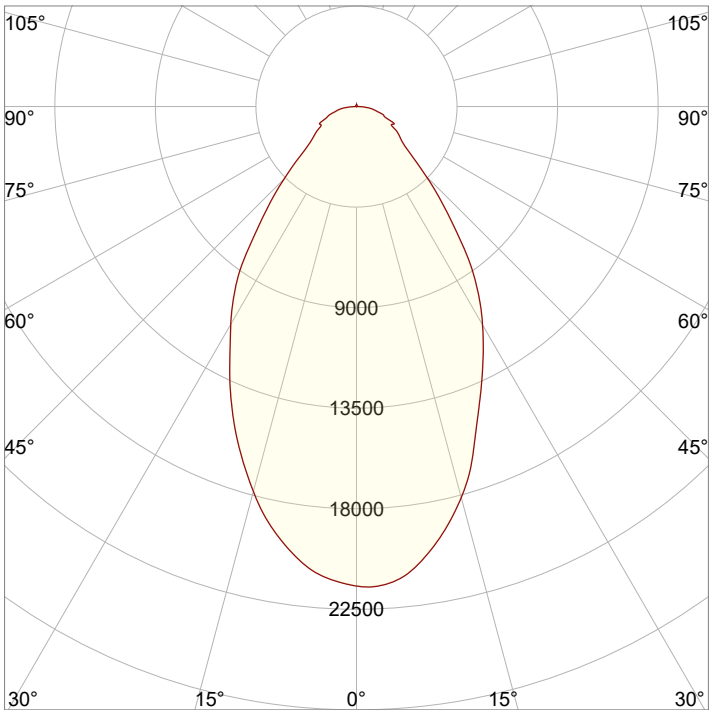
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	11.9 ft	19.9 ft	39.9 ft	59.8 ft	79.7 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	21408	5352	2379	1338	856	595	437	335	264	214	177	149	127	109	95	84	74	66	59	54
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1988.9	497.2	221	124.3	79.6	55.2	40.6	31.1	24.6	19.9	16.4	13.8	11.8	10.1	8.8	7.8	6.9	6.1	5.5	5

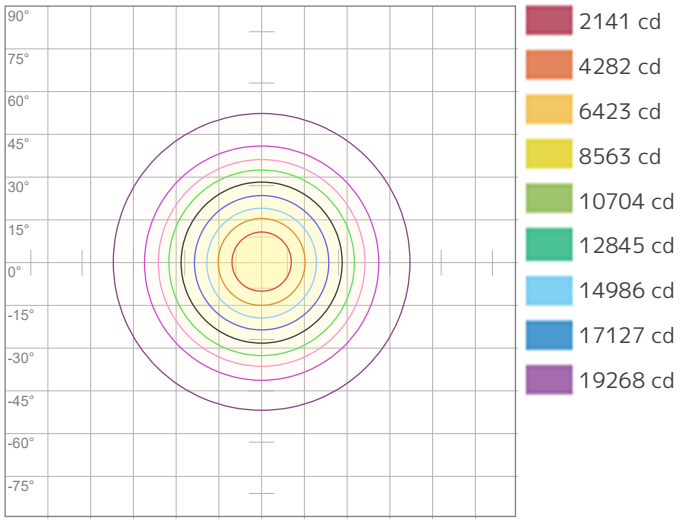
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
62.6°
Field Angle - 10%
115.5°
Cutoff Angle - 2.5%
167.2°

ISO Diagrams

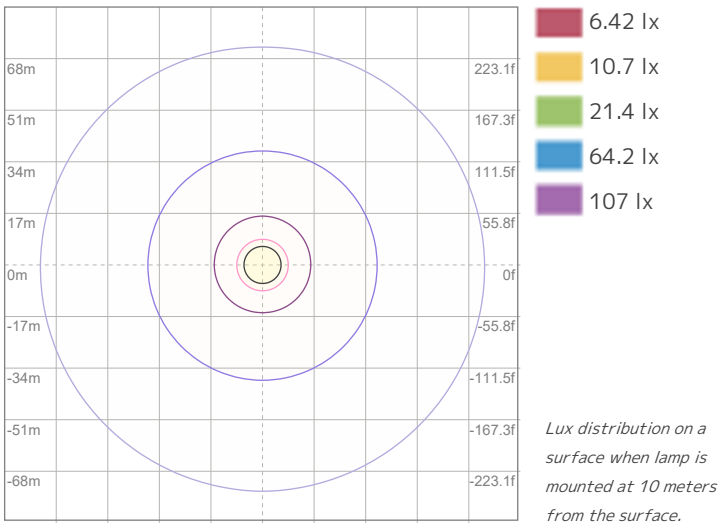


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 21408 cd



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

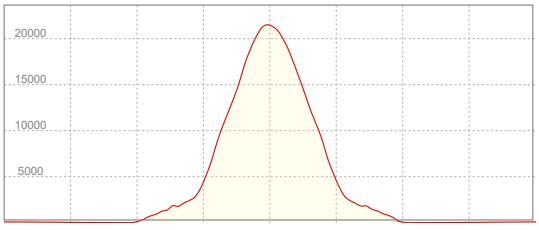
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 214 lx

Linear Distribution



Peak Candela

21501 cd

Calculate Center Beam Intensities

lux = 21501 / distance(m)^2

fc = 21501 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (Intensifier, 6000K)

Key Measurements

Output

Total Lumen Output: 27667 lm

Peak Intensity: 21322 cd

Beam

Beam Angle (50%): 62.5°

Field Angle (10%): 115.2°

Cutoff Angle (2.5%): 167.3°

Color

Color Temperature: 6039 K

CRI: 91.8

TLCI: 91

TM30 R_F: 89.9

TM30 R_g: 105.6

Power Details

Efficacy: 50 Lumen/Watt

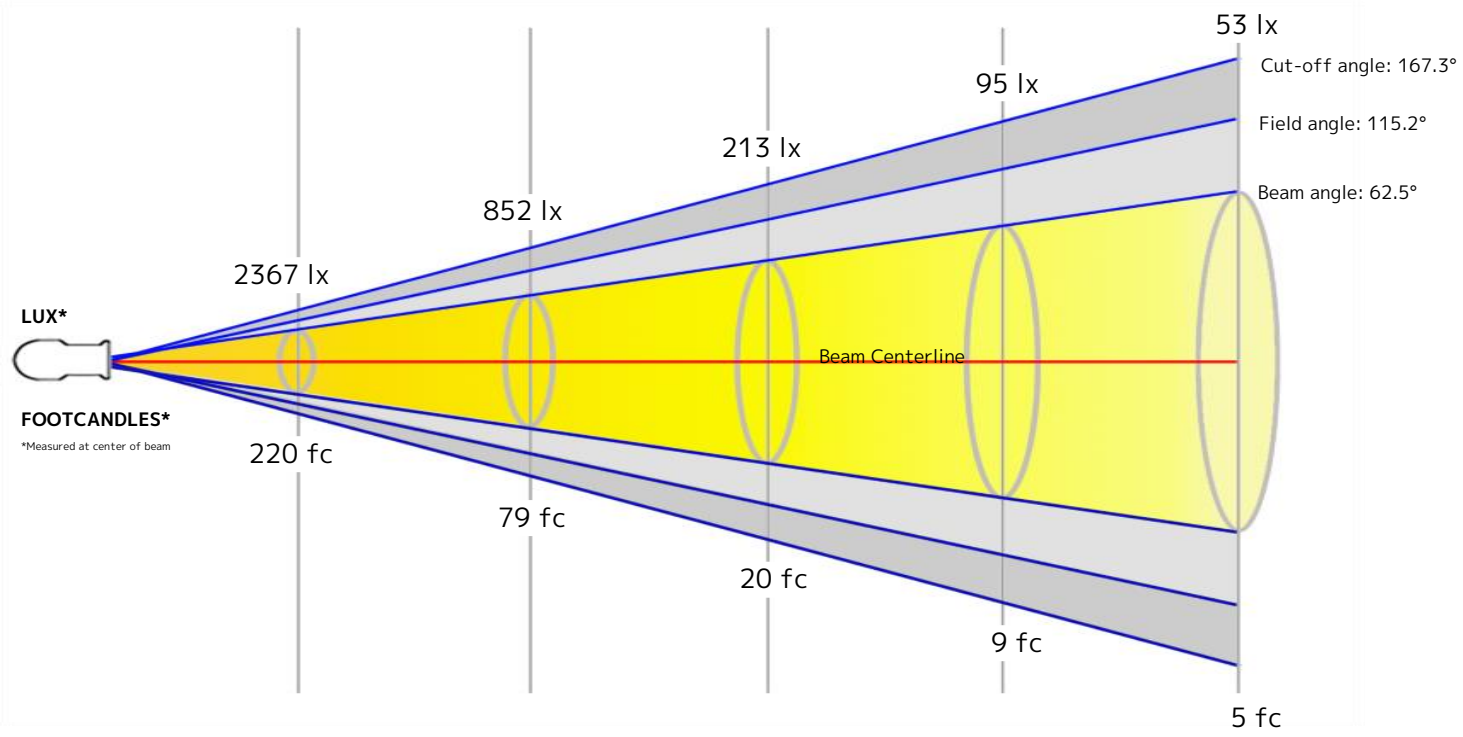
Power: 553 W

Supply Voltage: 118 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	3.6 m	6.1 m	12.1	18.2 m	24.3 m



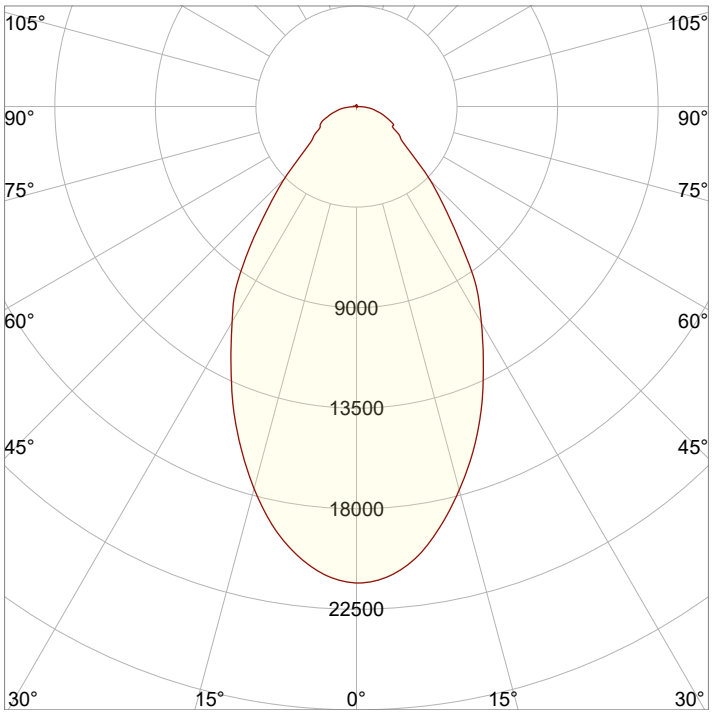
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	11.9 ft	19.9 ft	39.8 ft	59.7 ft	79.5 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	21301	5325	2367	1331	852	592	435	333	263	213	176	148	126	109	95	83	74	66	59	53
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1978.9	494.7	219.9	123.7	79.2	55	40.4	30.9	24.4	19.8	16.4	13.7	11.7	10.1	8.8	7.7	6.8	6.1	5.5	4.9

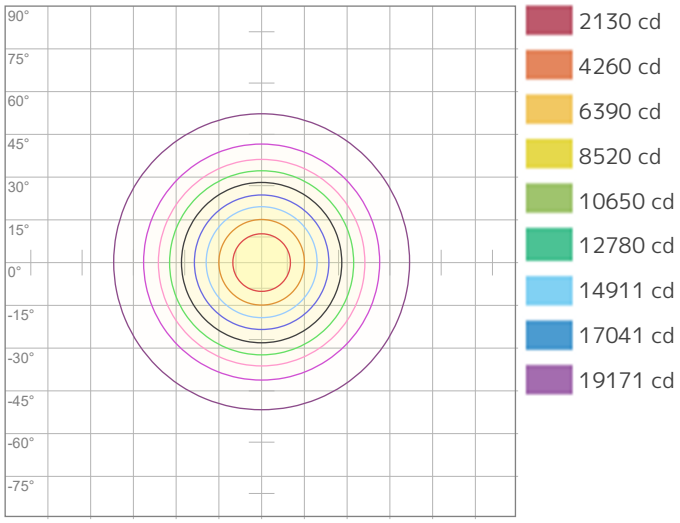
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
62.5°
Field Angle - 10%
115.2°
Cutoff Angle - 2.5%
167.3°

ISO Diagrams

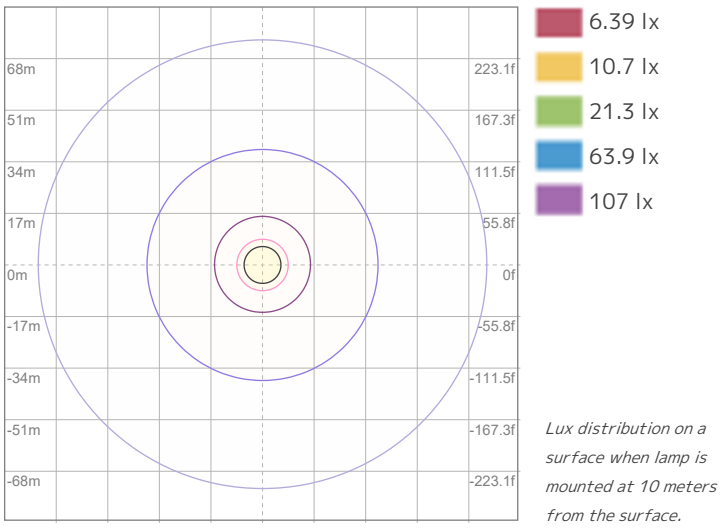


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 21301 cd



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

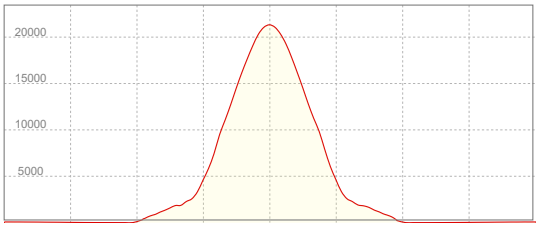
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 213 lx

Linear Distribution



Peak Candela

21322 cd

Calculate Center Beam Intensities

lux = 21322 / distance(m)^2

fc = 21322 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (Intensifier, 8500K)

Prepared For ELATION PROFESSIONAL

Key Measurements

Output

Total Lumen Output: 25529 lm

Peak Intensity: 19675 cd

Beam

Beam Angle (50%): 62.6°

Field Angle (10%): 115.5°

Cutoff Angle (2.5%): 166.9°

Color

Color Temperature: 8488 K

CRI: 93.5

TLCI: 95

TM30 R_F: 89.2

TM30 R_g: 99.4

Power Details

Efficacy: 46 Lumen/Watt

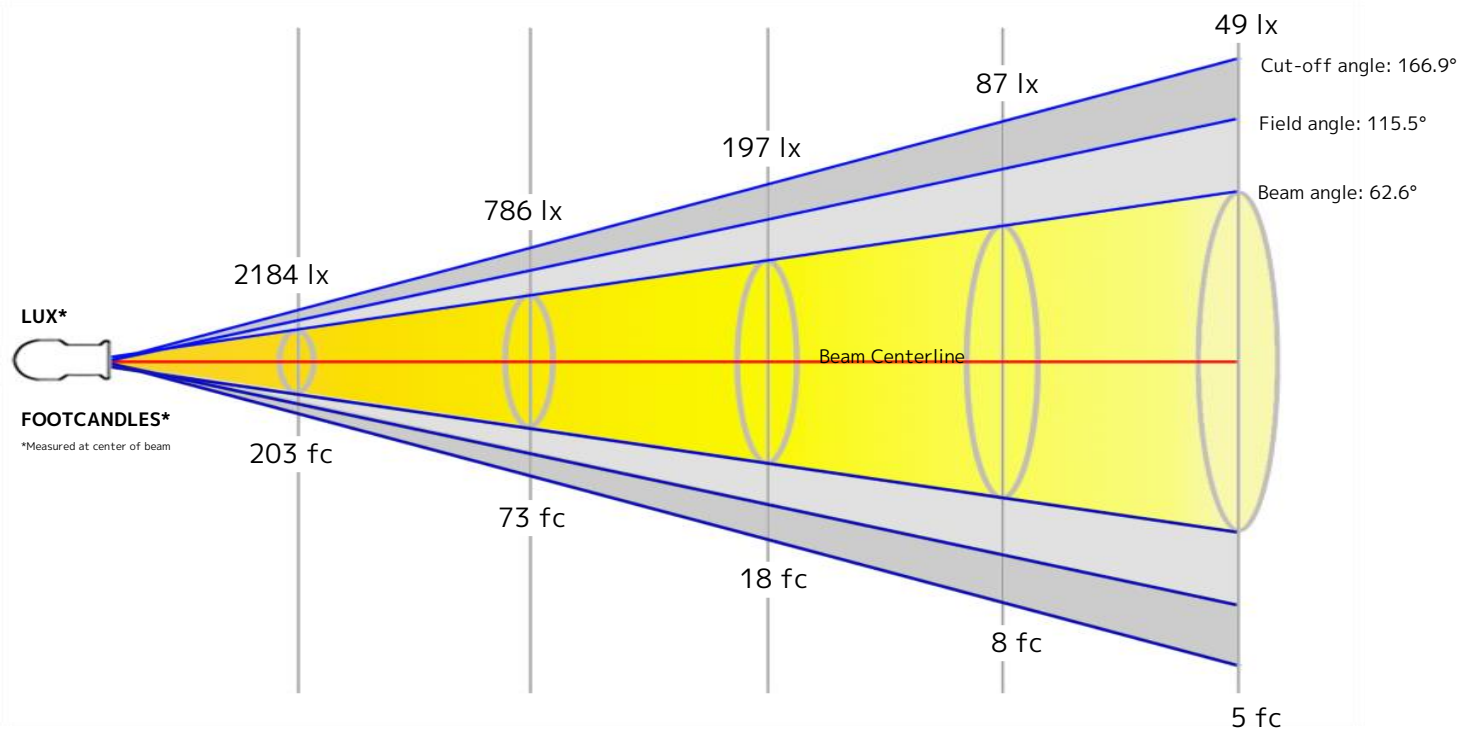
Power: 550 W

Supply Voltage: 118 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	3.7 m	6.1 m	12.2	18.3 m	24.3 m



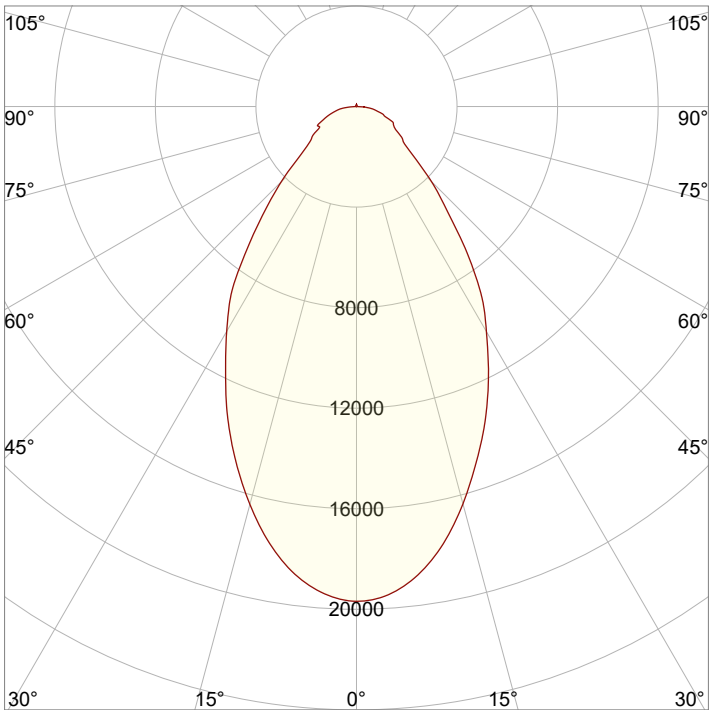
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	11.9 ft	20 ft	39.9 ft	59.9 ft	79.8 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	19654	4914	2184	1228	786	546	401	307	243	197	162	136	116	100	87	77	68	61	54	49
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1825.9	456.5	202.9	114.1	73	50.7	37.3	28.5	22.5	18.3	15.1	12.7	10.8	9.3	8.1	7.1	6.3	5.6	5.1	4.6

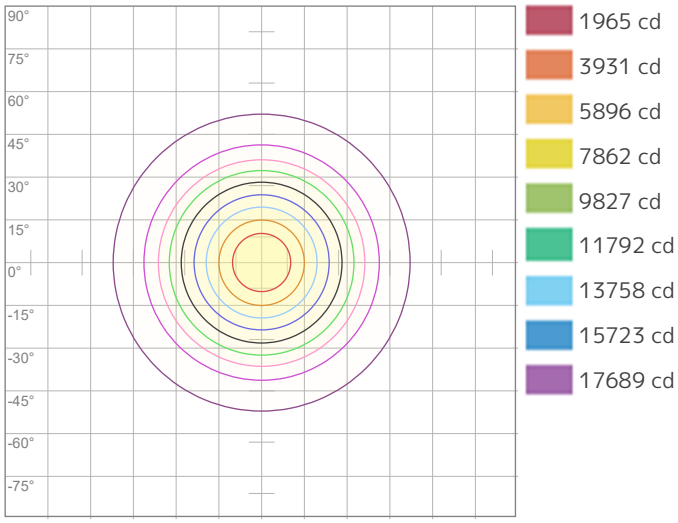
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
62.6°
Field Angle - 10%
115.5°
Cutoff Angle - 2.5%
166.9°

ISO Diagrams

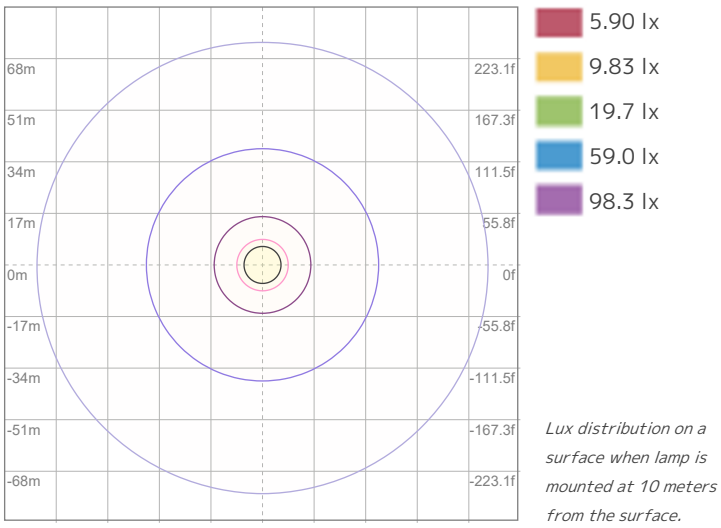


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 19654 cd



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

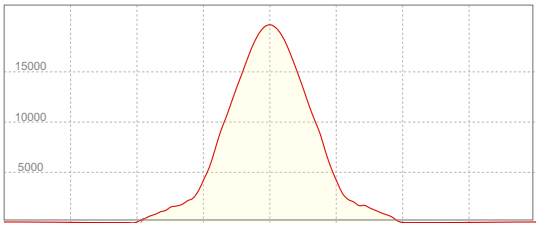
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 197 lx

Linear Distribution



Peak Candela

19675 cd

Calculate Center Beam Intensities

lux = 19675 / distance(m)^2

fc = 19675 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (Intensifier, 6500K)

Key Measurements

Output

Total Lumen Output: 27039 lm

Peak Intensity: 20775 cd

Beam

Beam Angle (50%): 63°

Field Angle (10%): 116°

Cutoff Angle (2.5%): 167.3°

Color

Color Temperature: 6526 K

CRI: 93.4

TLCI: 94

TM30 R_F: 91.0

TM30 R_g: 104.1

Power Details

Efficacy: 49 Lumen/Watt

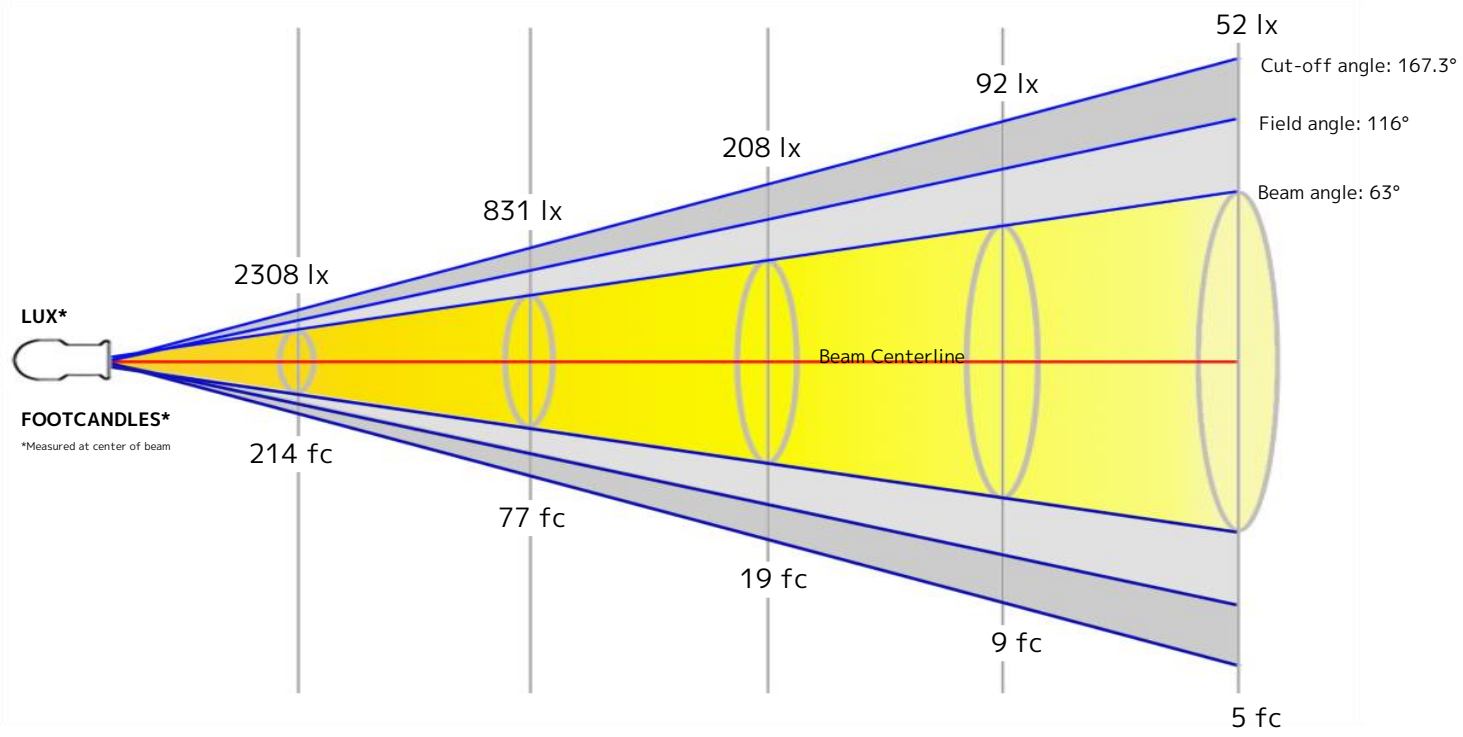
Power: 556 W

Supply Voltage: 118 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	3.7 m	6.1 m	12.3	18.4 m	24.5 m



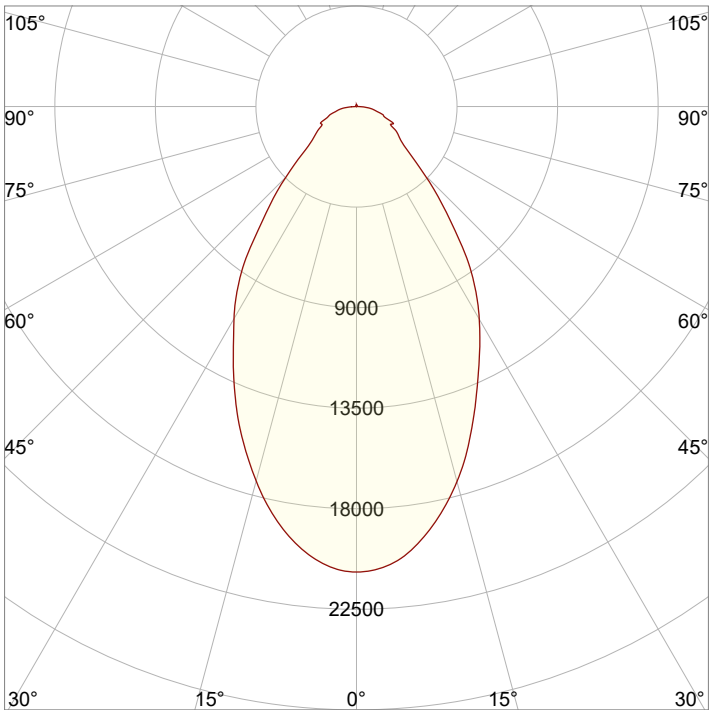
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	12 ft	20.1 ft	40.2 ft	60.3 ft	80.4 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	20772	5193	2308	1298	831	577	424	325	256	208	172	144	123	106	92	81	72	64	58	52
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1929.7	482.4	214.4	120.6	77.2	53.6	39.4	30.2	23.8	19.3	15.9	13.4	11.4	9.8	8.6	7.5	6.7	6	5.3	4.8

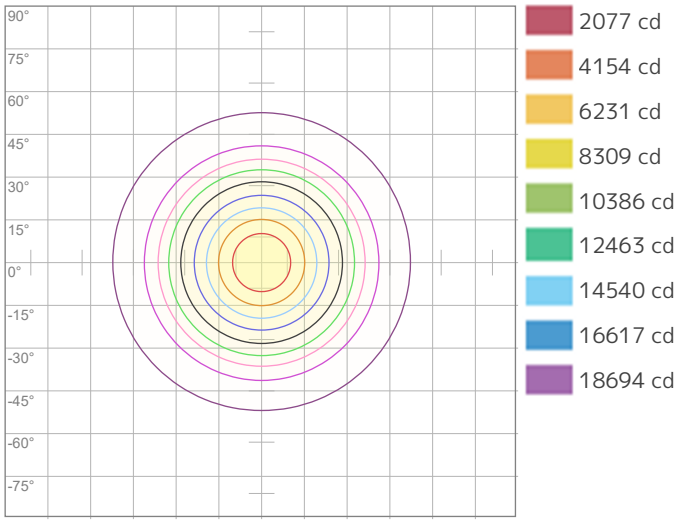
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
63°
Field Angle - 10%
116°
Cutoff Angle - 2.5%
167.3°

ISO Diagrams

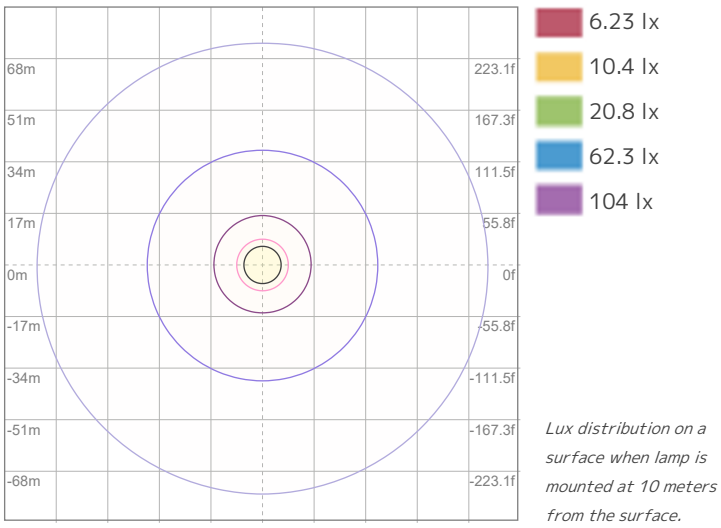


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 20772 cd



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

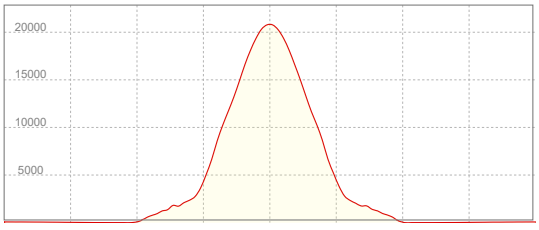
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 208 lx

Linear Distribution



Peak Candela

20775 cd

Calculate Center Beam Intensities

lux = 20775 / distance(m)^2

fc = 20775 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (Intensifier, 10000K)

Key Measurements

Output

Total Lumen Output: 25560 lm

Peak Intensity: 19639 cd

Beam

Beam Angle (50%): 62.6°

Field Angle (10%): 115.7°

Cutoff Angle (2.5%): 167.1°

Color

Color Temperature: 9992 K

CRI: 94.8

TLCI: 94

TM30 R_F: 89.2

TM30 R_g: 97.6

Power Details

Efficacy: 46 Lumen/Watt

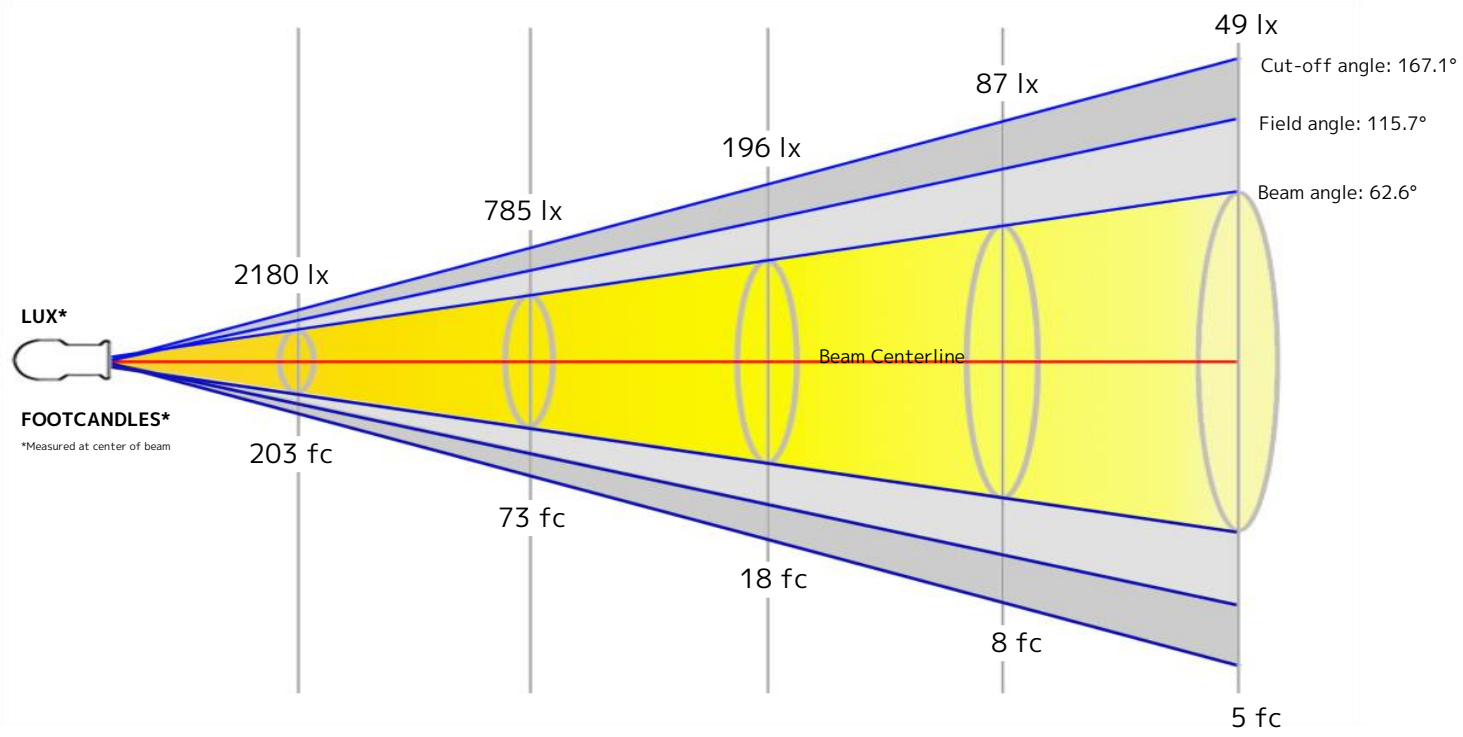
Power: 550 W

Supply Voltage: 118 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	3.6 m	6.1 m	12.1	18.2 m	24.3 m



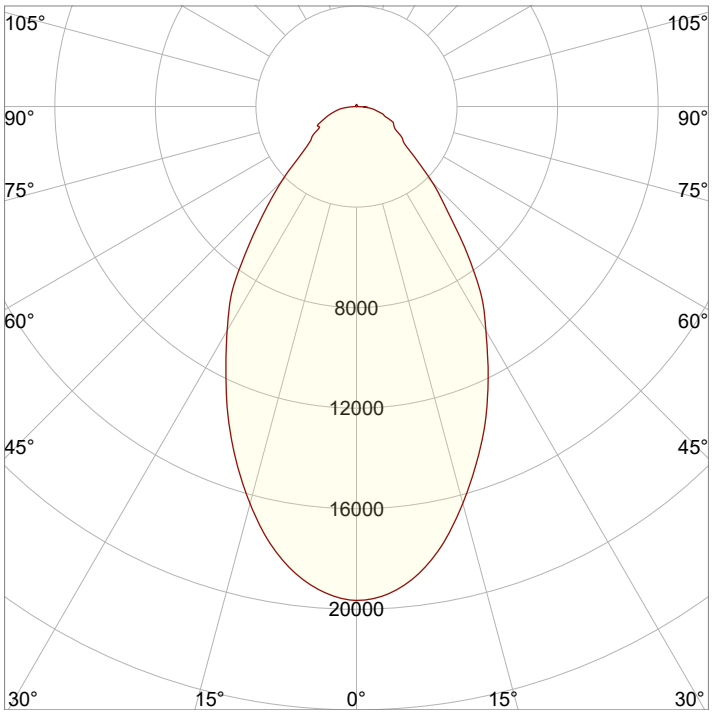
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	11.9 ft	19.9 ft	39.8 ft	59.8 ft	79.7 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	19621	4905	2180	1226	785	545	400	307	242	196	162	136	116	100	87	77	68	61	54	49
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1822.8	455.7	202.5	113.9	72.9	50.6	37.2	28.5	22.5	18.2	15.1	12.7	10.8	9.3	8.1	7.1	6.3	5.6	5	4.6

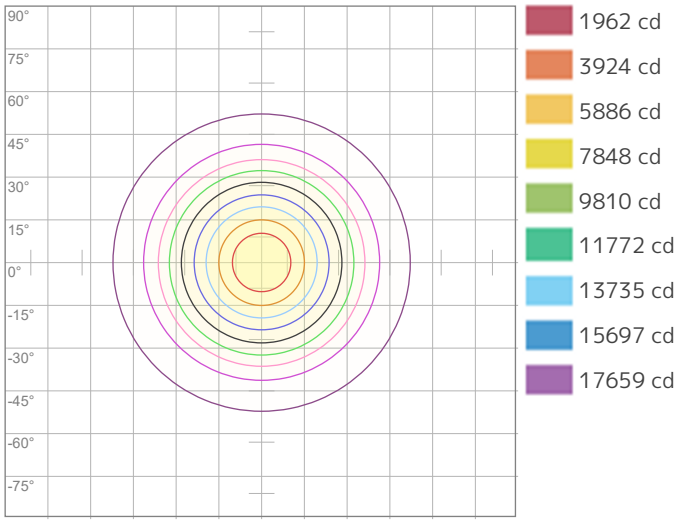
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
62.6°
Field Angle - 10%
115.7°
Cutoff Angle - 2.5%
167.1°

ISO Diagrams

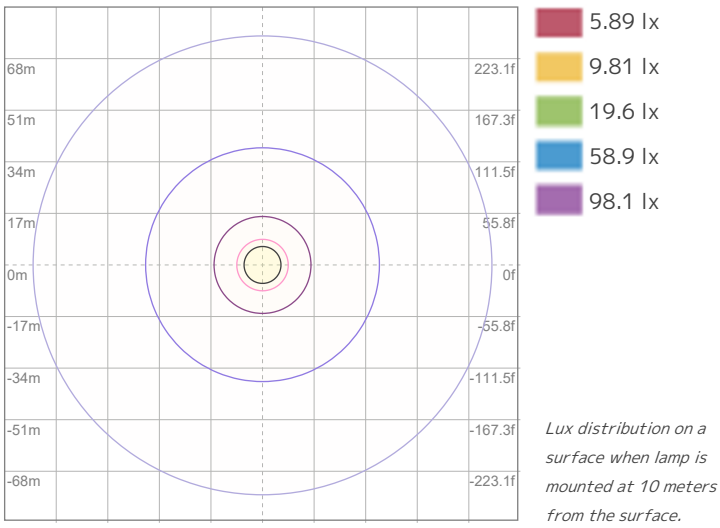


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 19621 cd



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

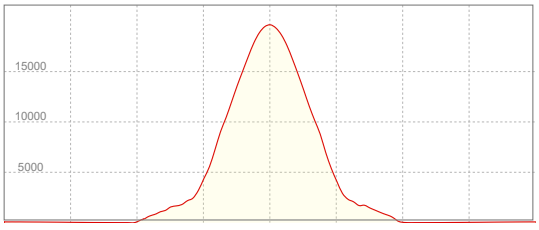
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 196 lx

Linear Distribution



Peak Candela

19639 cd

Calculate Center Beam Intensities

lux = 19639 / distance(m)^2

fc = 19639 / distance(ft)^2

Measurement Date: 9/28/2023

Key Measurements

Output

Total Lumen Output: 32353 lm

Peak Intensity: 11621 cd

Beam

Beam Angle (50%): 112.1°

Field Angle (10%): 152.8°

Cutoff Angle (2.5%): 164.8°

Color

Color Temperature: 19312 K

CRI: 73.7

TLCI: 92

TM30 R_F: 78.5

TM30 R_g: 104.6

Power Details

Efficacy: 59 Lumen/Watt

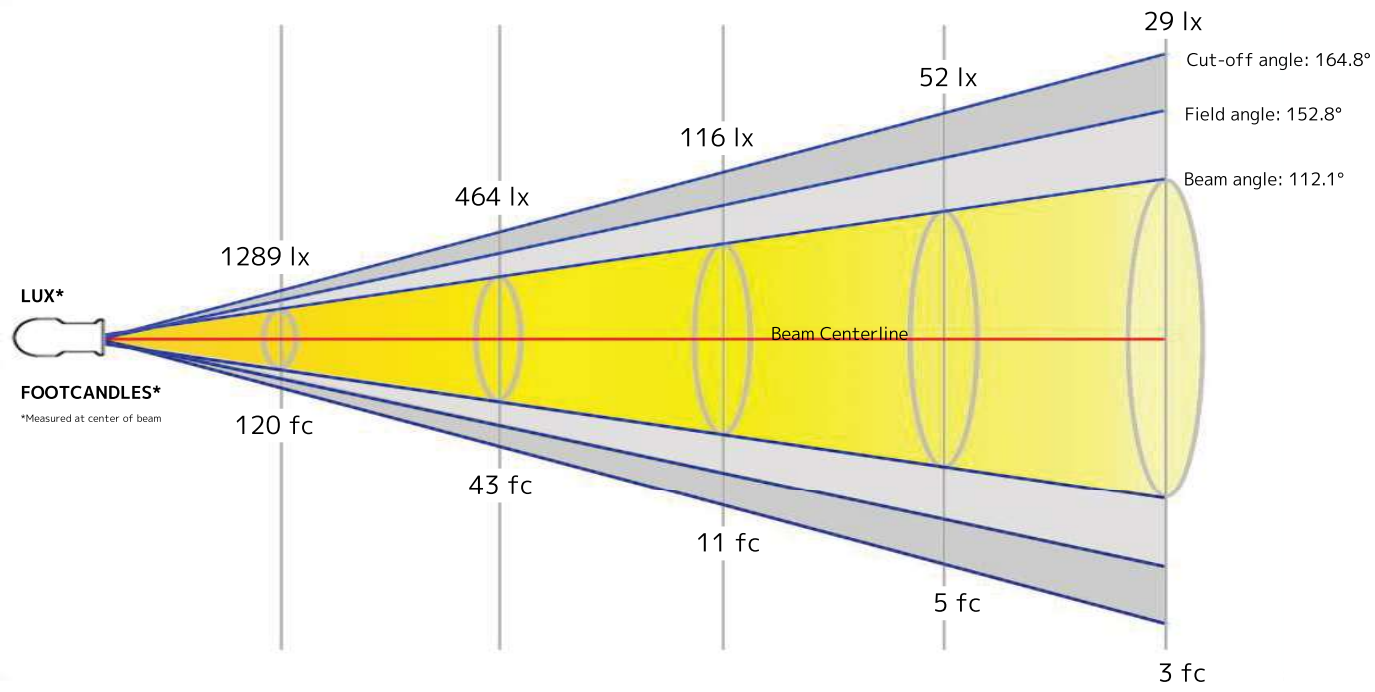
Power: 545 W

Supply Voltage: 118 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	8.9 m	14.9 m	29.7	44.6 m	59.4 m



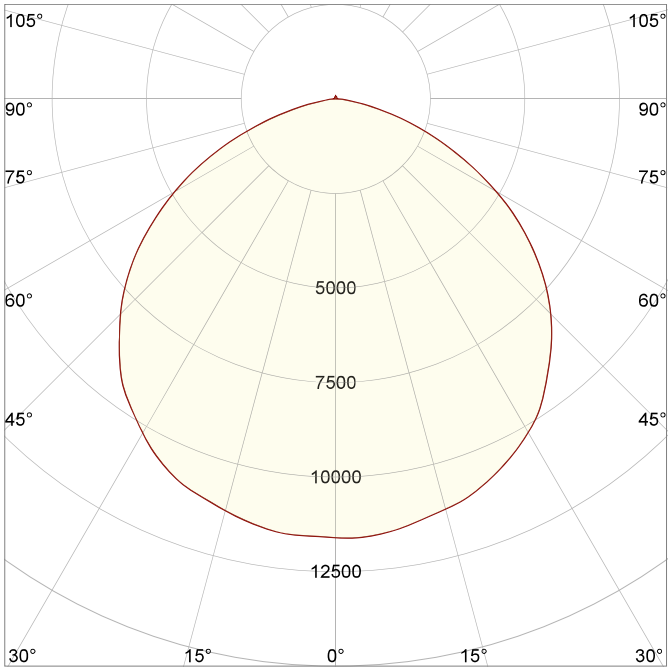
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	29.1 ft	48.7 ft	97.4 ft	146.2 ft	194.9 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	11600	2900	1289	725	464	322	237	181	143	116	96	81	69	59	52	45	40	36	32	29
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1077.7	269.4	119.7	67.4	43.1	29.9	22	16.8	13.3	10.8	8.9	7.5	6.4	5.5	4.8	4.2	3.7	3.3	3	2.7

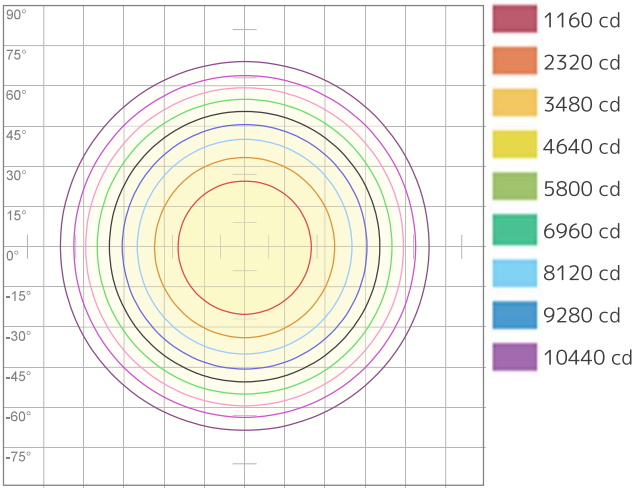
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
112.1°
Field Angle - 10%
152.8°
Cutoff Angle - 2.5%
164.8°

ISO Diagrams

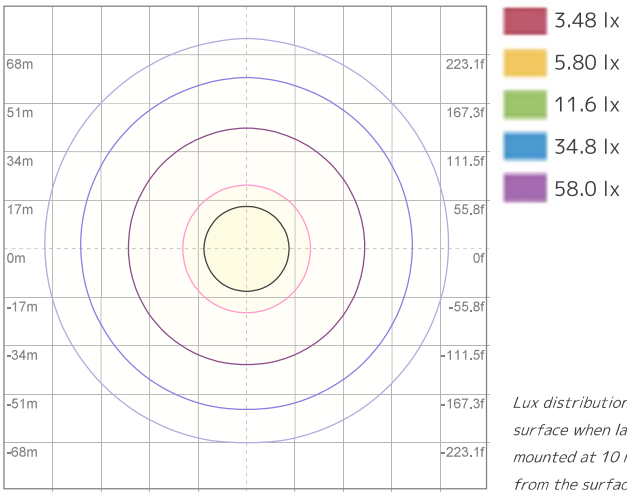


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 11600 cd



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

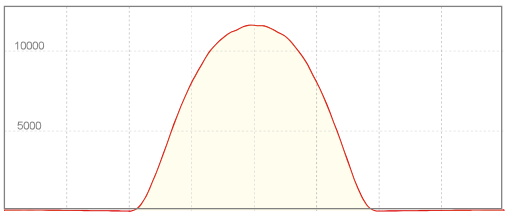
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 116 lx

Linear Distribution



Peak Candela
11621 cd

Calculate Center Beam Intensities
lux = 11621 / distance(m)^2
fc = 11621 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (No Diffusor, 2700K)

Key Measurements

Output

Total Lumen Output: 44523 lm

Peak Intensity: 16388 cd

Beam

Beam Angle (50%): 110.2°

Field Angle (10%): 152.2°

Cutoff Angle (2.5%): 165.4°

Color

Color Temperature: 2709 K

CRI: 91.7

TLCI: 80

TM30 R_F: 90.1

TM30 R_g: 107.1

Power Details

Efficacy: 81 Lumen/Watt

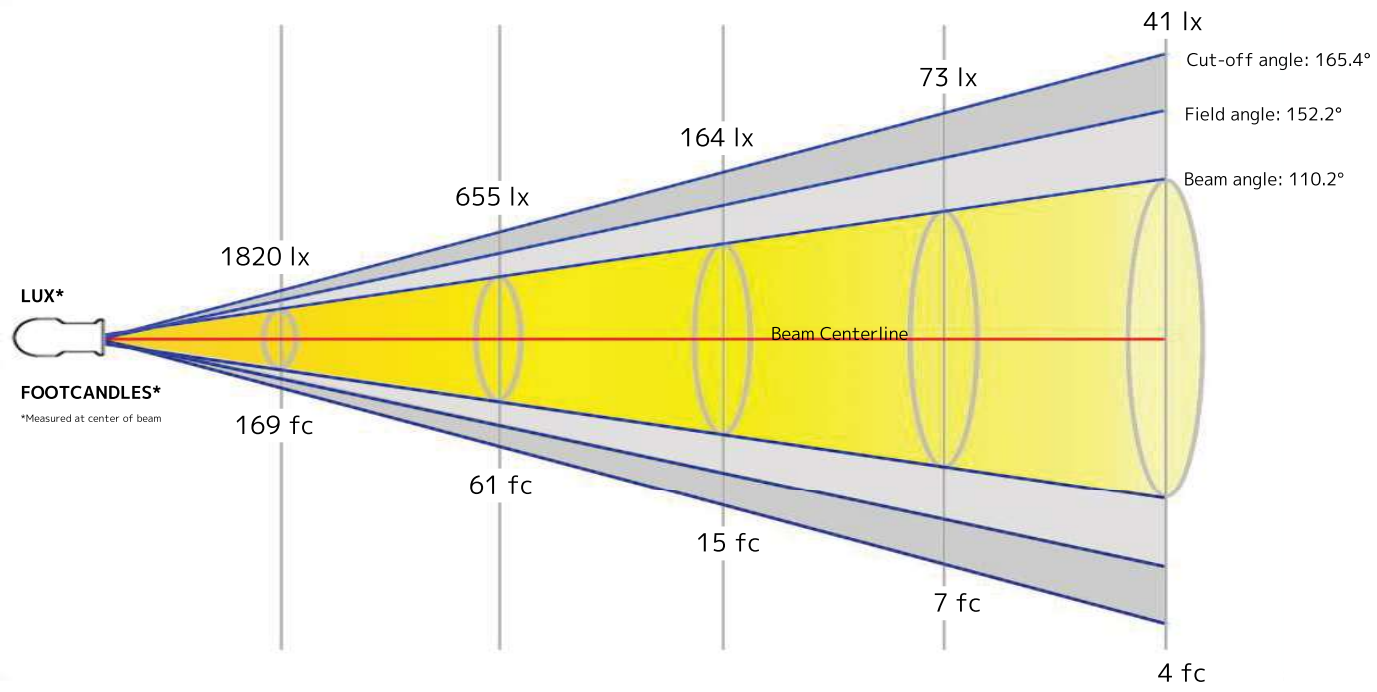
Power: 550 W

Supply Voltage: 118 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	8.6 m	14.3 m	28.7	43 m	57.3 m



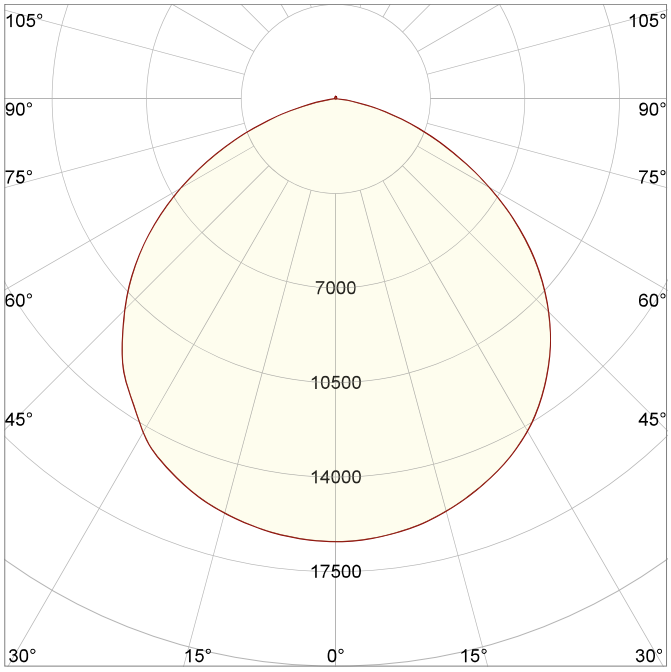
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	28.1 ft	47 ft	94 ft	141 ft	188.1 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	16379	4095	1820	1024	655	455	334	256	202	164	135	114	97	84	73	64	57	51	45	41
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1521.7	380.4	169.1	95.1	60.9	42.3	31.1	23.8	18.8	15.2	12.6	10.6	9	7.8	6.8	5.9	5.3	4.7	4.2	3.8

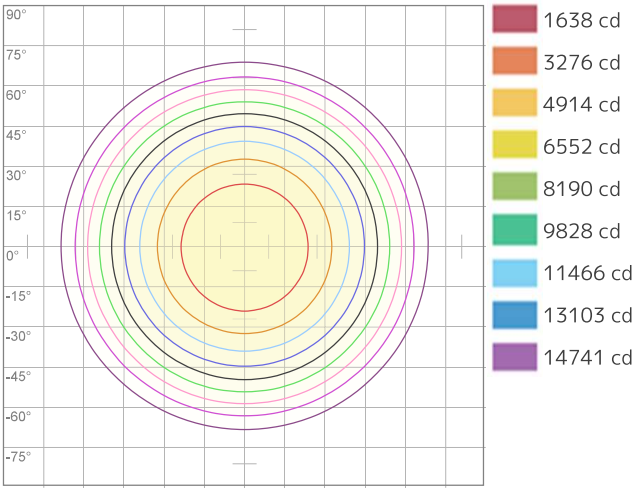
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
110.2°
Field Angle - 10%
152.2°
Cutoff Angle - 2.5%
165.4°

ISO Diagrams

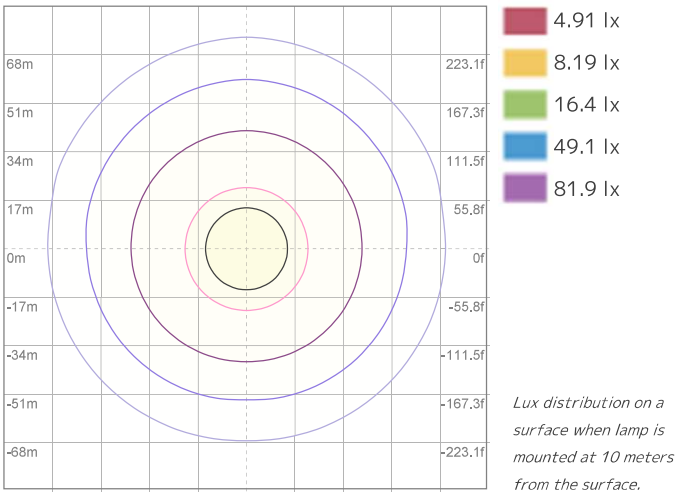


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 16379 cd



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

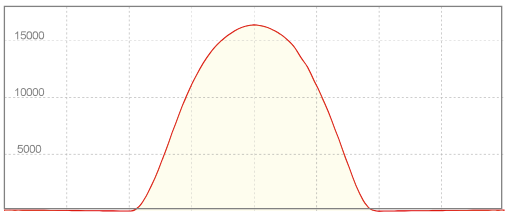
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 164 lx

Linear Distribution



Peak Candela

16388 cd

Calculate Center Beam Intensities

lux = 16388 / distance(m)^2

fc = 16388 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (No Diffusor, 3200K)

Prepared For ELATION PROFESSIONAL

Key Measurements

Output

Total Lumen Output: 44765 lm

Peak Intensity: 16436 cd

Beam

Beam Angle (50%): 110.4°

Field Angle (10%): 152.4°

Cutoff Angle (2.5%): 165.6°

Color

Color Temperature: 3159 K

CRI: 90.8

TLCI: 83

TM30 R_F: 90.5

TM30 R_g: 107.6

Power Details

Efficacy: 86 Lumen/Watt

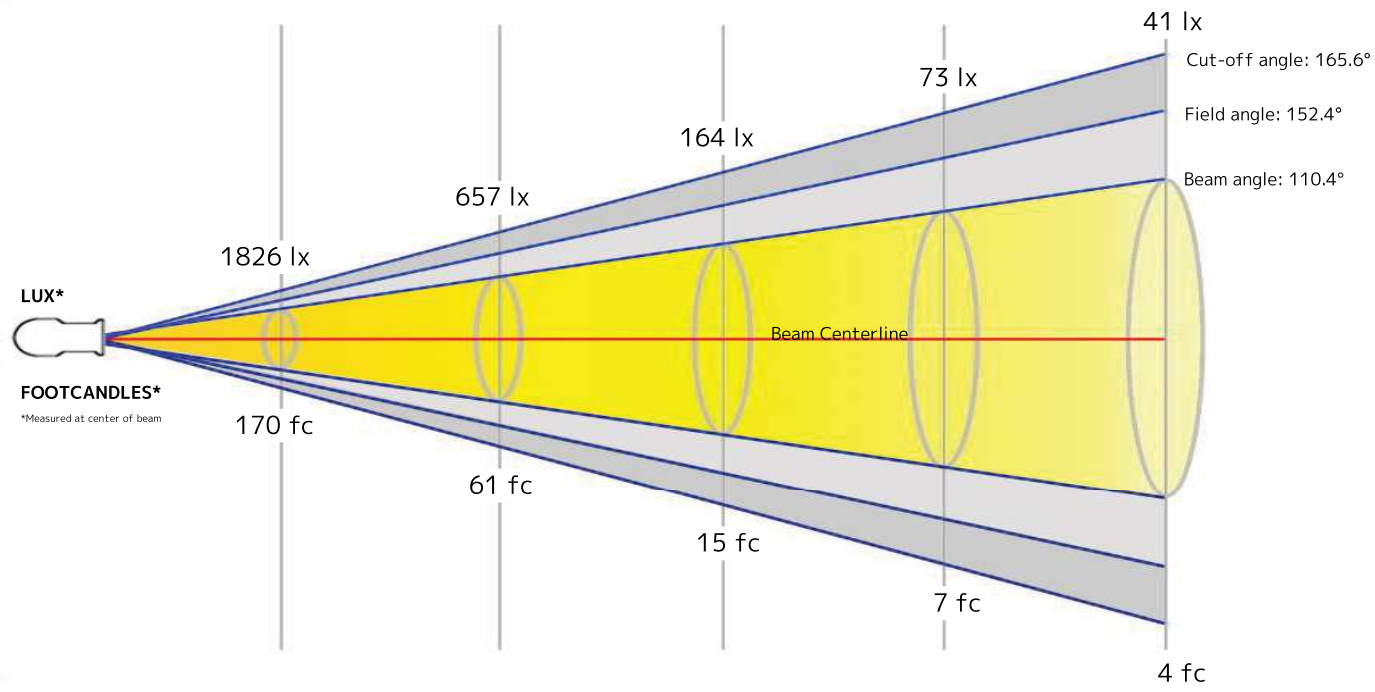
Power: 520 W

Supply Voltage: 118 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	8.6 m	14.4 m	28.8	43.2 m	57.6 m



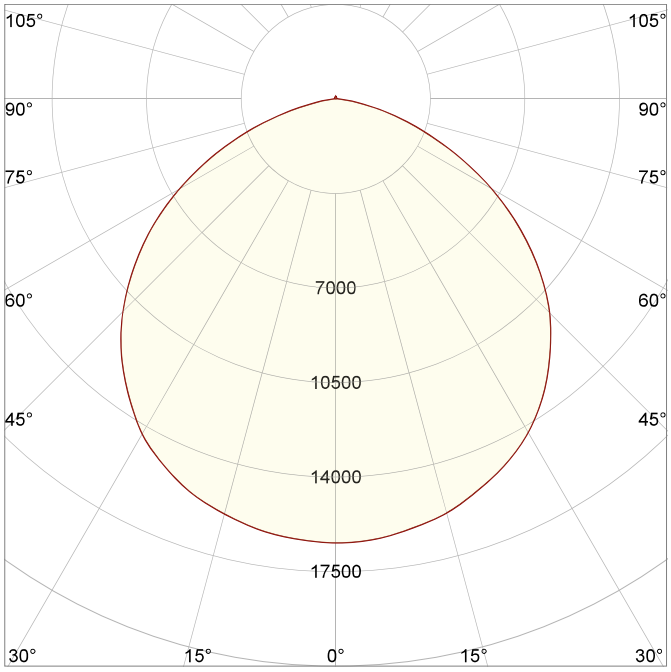
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	28.2 ft	47.2 ft	94.5 ft	141.7 ft	188.9 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	16433	4108	1826	1027	657	456	335	257	203	164	136	114	97	84	73	64	57	51	46	41
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1526.7	381.7	169.6	95.4	61.1	42.4	31.2	23.9	18.8	15.3	12.6	10.6	9	7.8	6.8	6	5.3	4.7	4.2	3.8

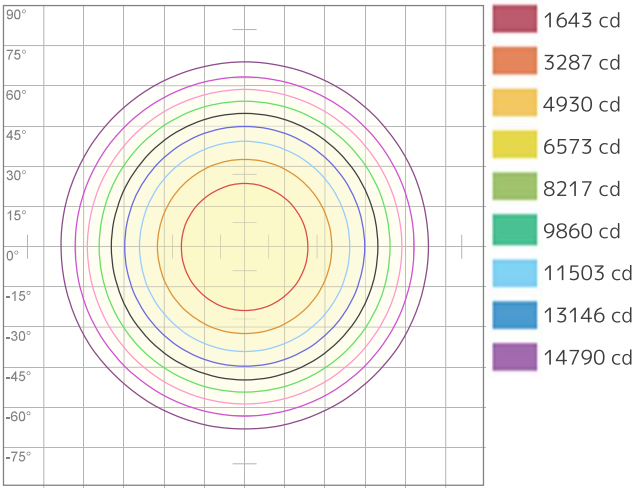
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
110.4°
Field Angle - 10%
152.4°
Cutoff Angle - 2.5%
165.6°

ISO Diagrams

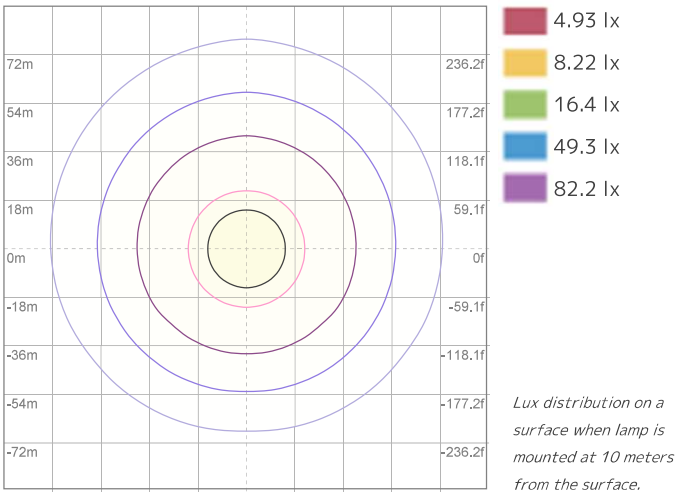


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 16433 cd



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

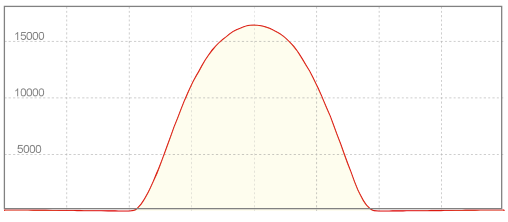
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 164 lx

Linear Distribution



Peak Candela

16436 cd

Calculate Center Beam Intensities

lux = 16436 / distance(m)^2

fc = 16436 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (No Diffusor, 4500K)

Key Measurements

Output

Total Lumen Output: 42622 lm

Peak Intensity: 15507 cd

Beam

Beam Angle (50%): 111.1°

Field Angle (10%): 152.6°

Cutoff Angle (2.5%): 165.7°

Color

Color Temperature: 4550 K

CRI: 91.9

TLCI: 88

TM30 R_F: 90.5

TM30 R_g: 106.5

Power Details

Efficacy: 82 Lumen/Watt

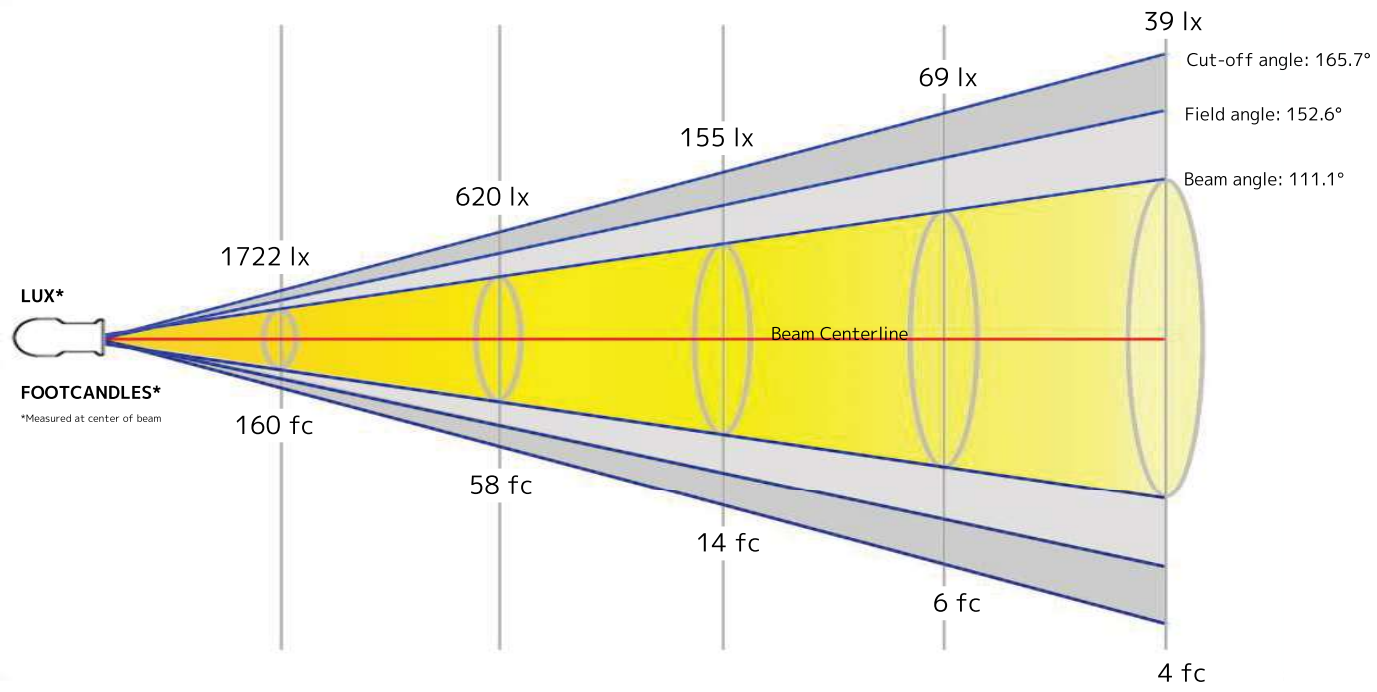
Power: 517 W

Supply Voltage: 117 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	8.7 m	14.6 m	29.2	43.7 m	58.3 m



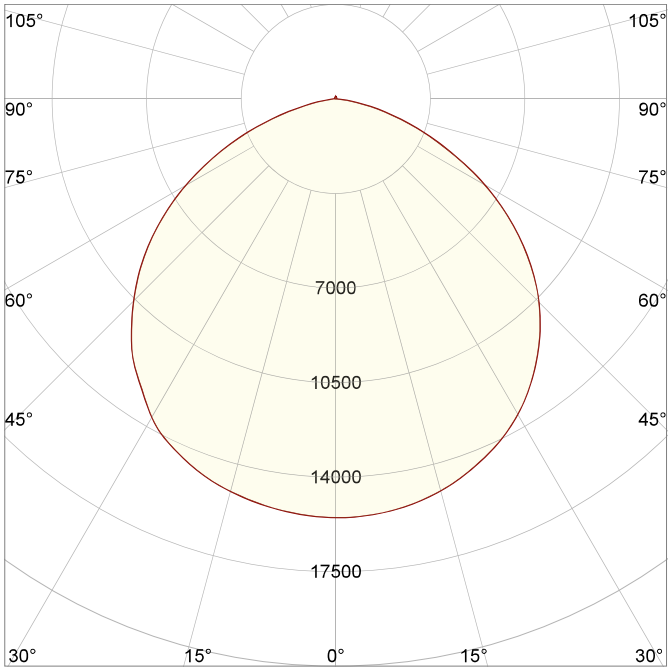
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	28.6 ft	47.8 ft	95.6 ft	143.4 ft	191.2 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	15496	3874	1722	969	620	430	316	242	191	155	128	108	92	79	69	61	54	48	43	39
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1439.6	359.9	160	90	57.6	40	29.4	22.5	17.8	14.4	11.9	10	8.5	7.3	6.4	5.6	5	4.4	4	3.6

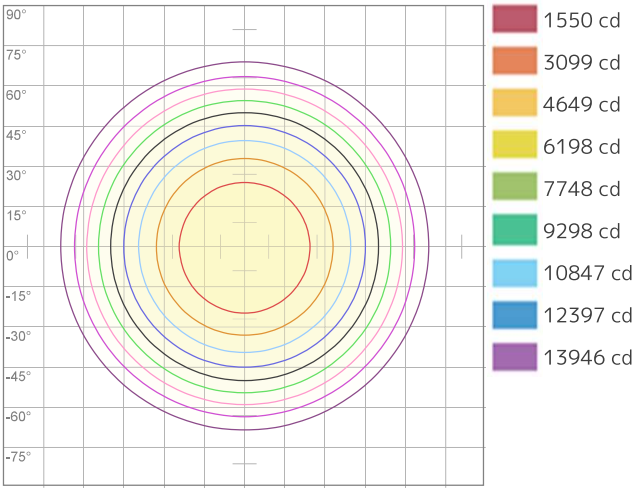
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
111.1°
Field Angle - 10%
152.6°
Cutoff Angle - 2.5%
165.7°

ISO Diagrams

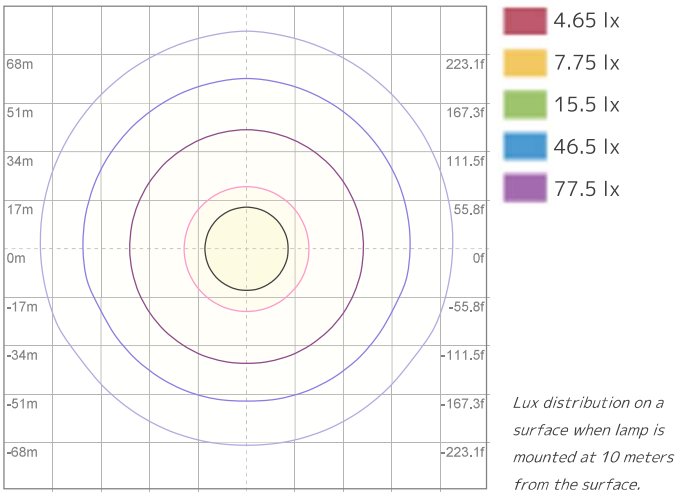


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 15496 cd



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

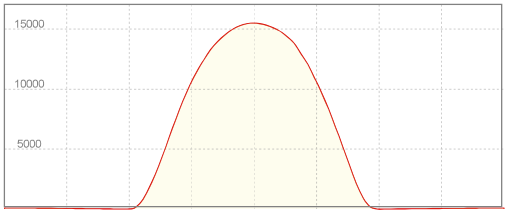
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 155 lx

Linear Distribution



Peak Candela
15507 cd

Calculate Center Beam Intensities

lux = 15507 / distance(m)^2

fc = 15507 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (No Diffusor, 5600K)

Prepared For ELATION PROFESSIONAL

Key Measurements

Output

Total Lumen Output: 41351 lm

Peak Intensity: 14998 cd

Beam

Beam Angle (50%): 111.3°

Field Angle (10%): 152.6°

Cutoff Angle (2.5%): 165.5°

Color

Color Temperature: 5647 K

CRI: 91.2

TLCI: 90

TM30 R_F: 89.6

TM30 R_g: 106.3

Power Details

Efficacy: 80 Lumen/Watt

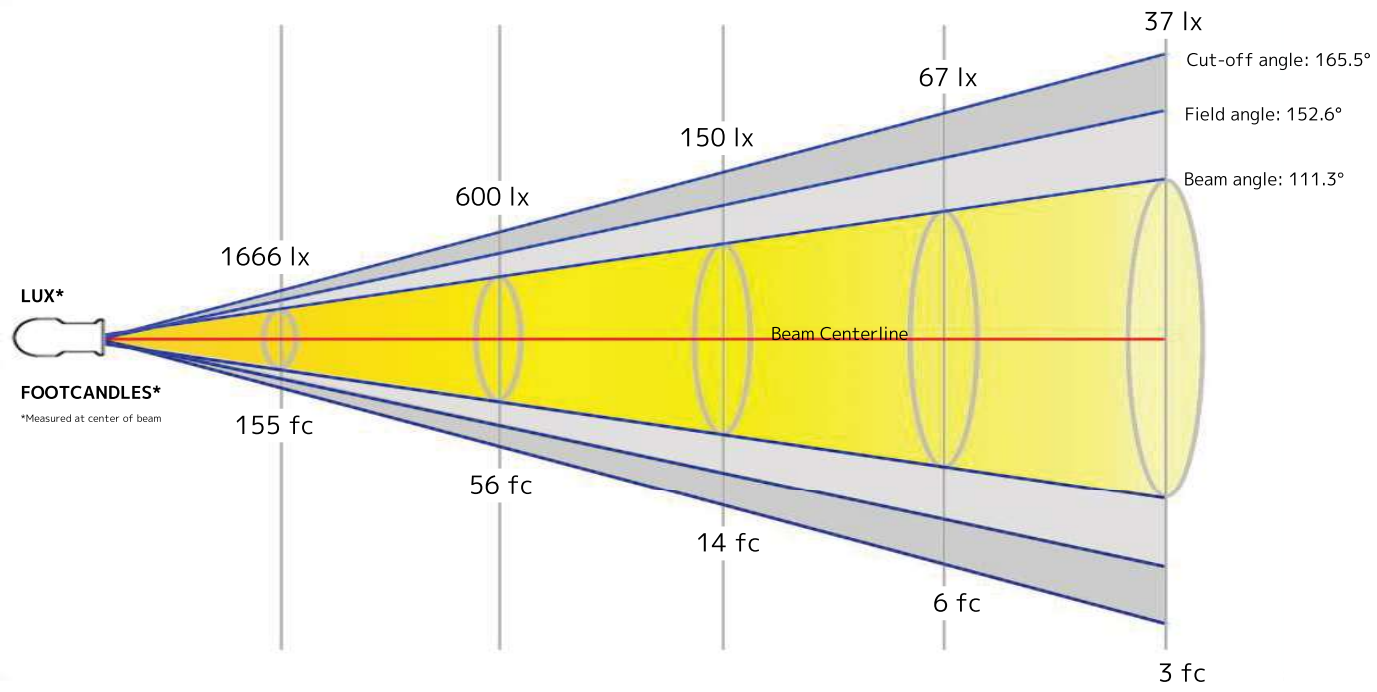
Power: 517 W

Supply Voltage: 118 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	8.8 m	14.6 m	29.3	43.9 m	58.5 m



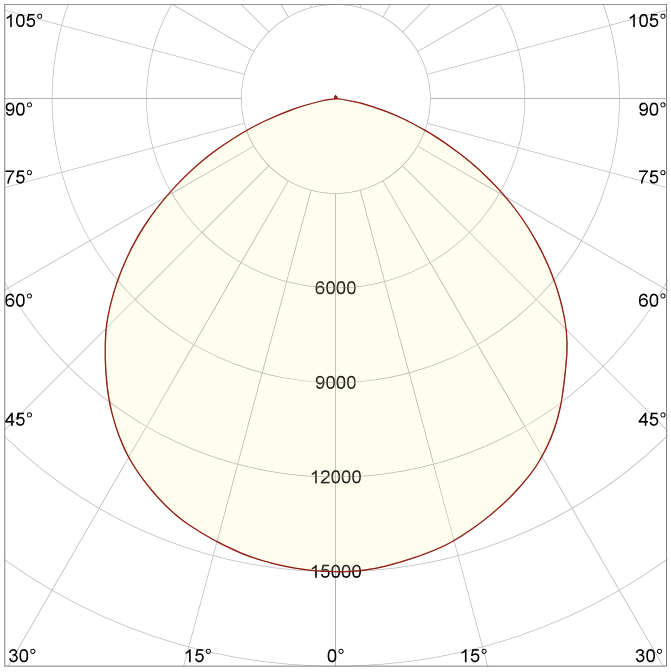
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	28.7 ft	48 ft	96 ft	144 ft	192 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	14993	3748	1666	937	600	416	306	234	185	150	124	104	89	76	67	59	52	46	42	37
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1392.9	348.2	154.8	87.1	55.7	38.7	28.4	21.8	17.2	13.9	11.5	9.7	8.2	7.1	6.2	5.4	4.8	4.3	3.9	3.5

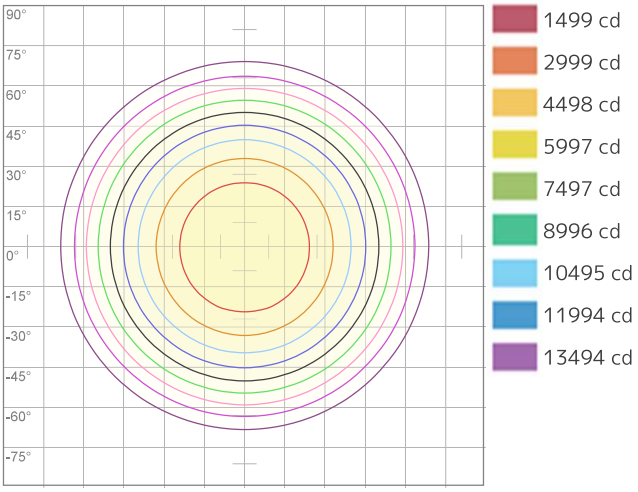
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
111.3°
Field Angle - 10%
152.6°
Cutoff Angle - 2.5%
165.5°

ISO Diagrams

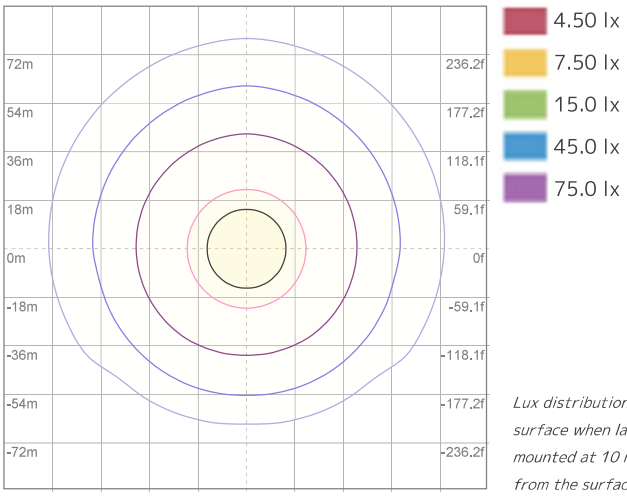


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 14993 cd



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

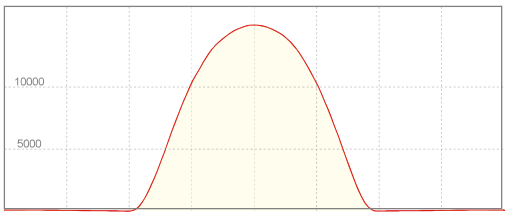
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 150 lx

Linear Distribution



Peak Candela
14998 cd

Calculate Center Beam Intensities

lux = 14998 / distance(m)^2

fc = 14998 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (No Diffusor, 6000K)

Prepared For ELATION PROFESSIONAL

Key Measurements

Output

Total Lumen Output: 41499 lm

Peak Intensity: 15037 cd

Beam

Beam Angle (50%): 111.3°

Field Angle (10%): 152.6°

Cutoff Angle (2.5%): 165.3°

Color

Color Temperature: 6028 K

CRI: 91.0

TLCI: 89

TM30 R_F: 89.1

TM30 R_g: 106.3

Power Details

Efficacy: 75 Lumen/Watt

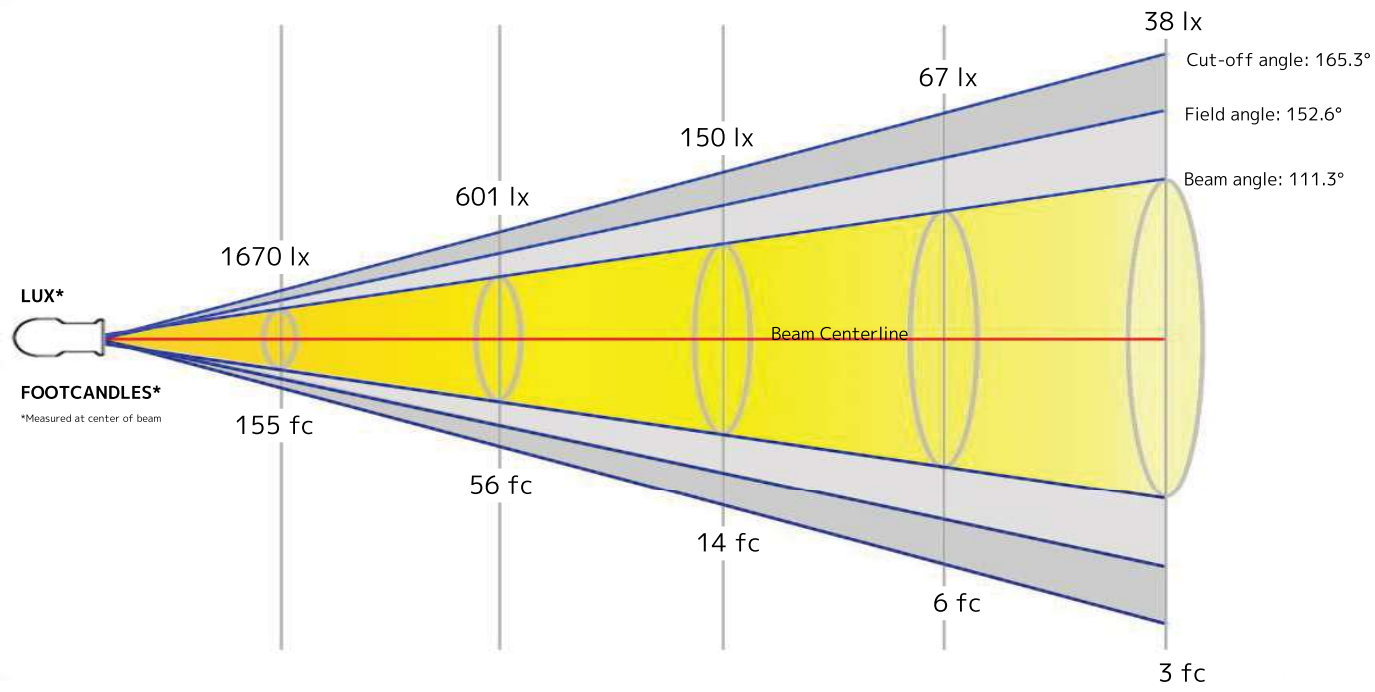
Power: 550 W

Supply Voltage: 118 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	8.8 m	14.6 m	29.3	43.9 m	58.5 m



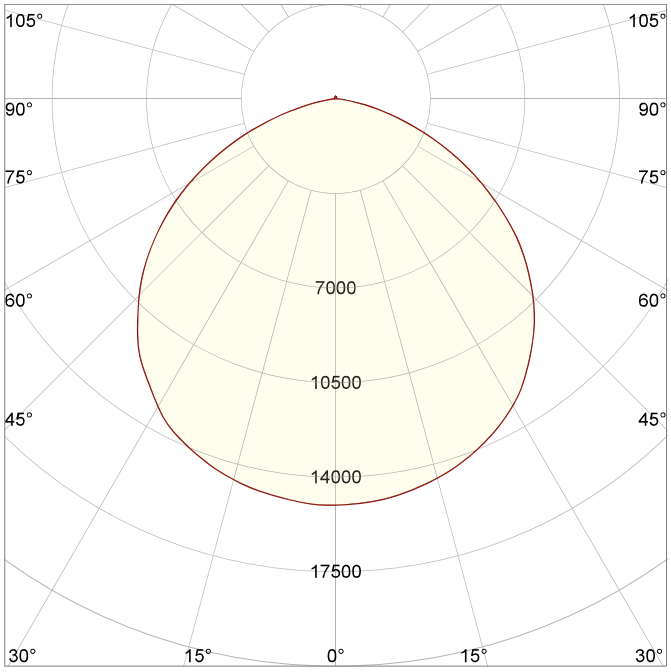
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	28.7 ft	48 ft	96 ft	143.9 ft	191.9 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	15027	3757	1670	939	601	417	307	235	186	150	124	104	89	77	67	59	52	46	42	38
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1396	349	155.1	87.3	55.8	38.8	28.5	21.8	17.2	14	11.5	9.7	8.3	7.1	6.2	5.5	4.8	4.3	3.9	3.5

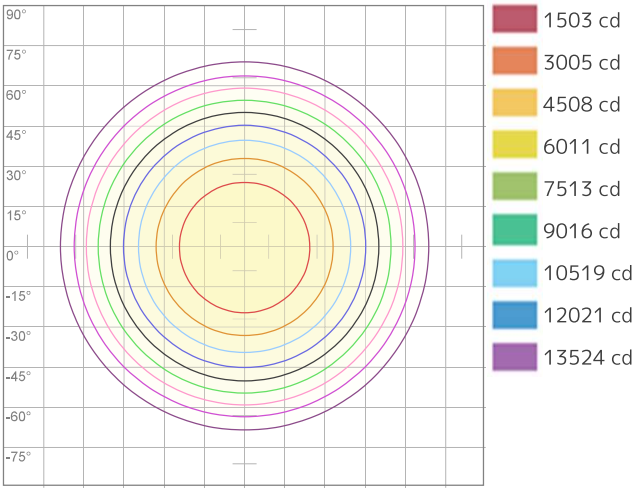
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
111.3°
Field Angle - 10%
152.6°
Cutoff Angle - 2.5%
165.3°

ISO Diagrams

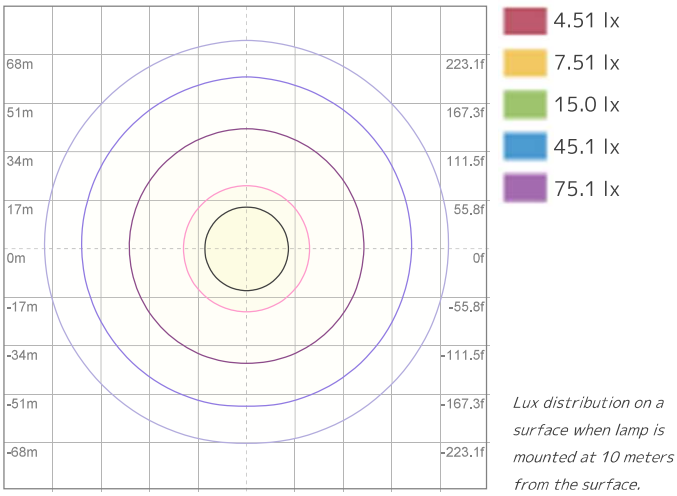


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 15027 cd



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

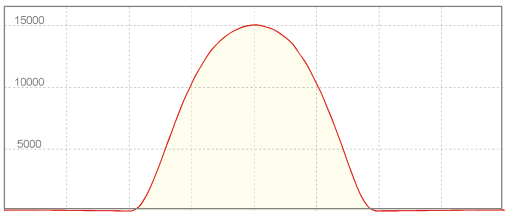
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 150 lx

Linear Distribution



Peak Candela
15037 cd

Calculate Center Beam Intensities

lux = 15037 / distance(m)^2

fc = 15037 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (No Diffusor, 6500K)

Prepared For ELATION PROFESSIONAL

Key Measurements

Output

Total Lumen Output: 40964 lm

Peak Intensity: 14837 cd

Beam

Beam Angle (50%): 111.3°

Field Angle (10%): 152.8°

Cutoff Angle (2.5%): 165.8°

Color

Color Temperature: 6555 K

CRI: 92.3

TLCI: 93

TM30 R_F: 90.2

TM30 R_g: 104.8

Power Details

Efficacy: 74 Lumen/Watt

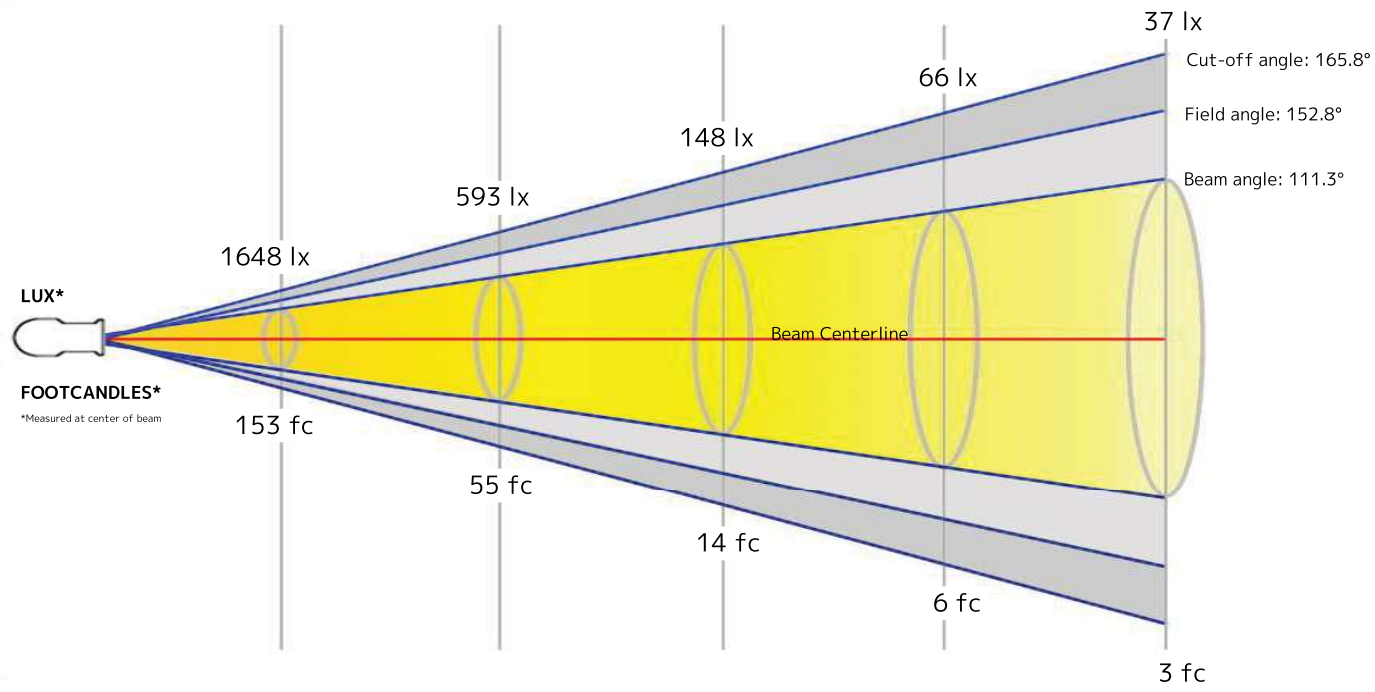
Power: 555 W

Supply Voltage: 118 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	8.8 m	14.6 m	29.3	43.9 m	58.6 m



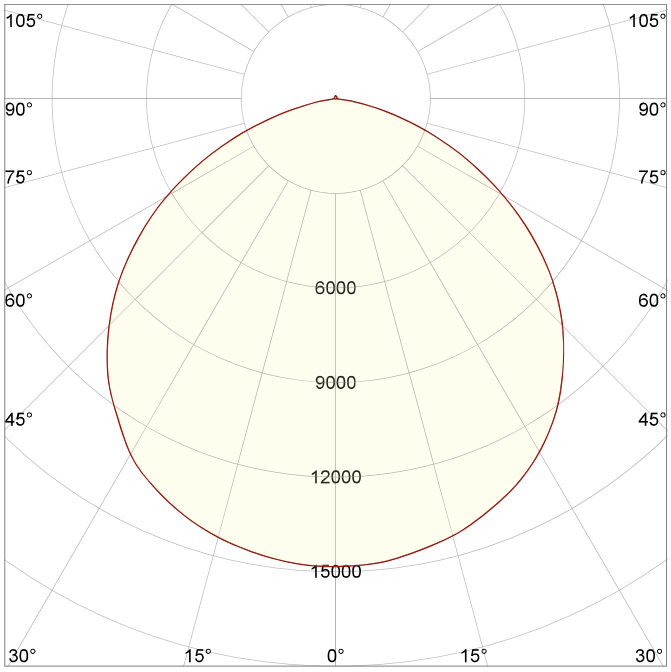
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	28.7 ft	48 ft	96 ft	144.1 ft	192.1 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	14833	3708	1648	927	593	412	303	232	183	148	123	103	88	76	66	58	51	46	41	37
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1378	344.5	153.1	86.1	55.1	38.3	28.1	21.5	17	13.8	11.4	9.6	8.2	7	6.1	5.4	4.8	4.3	3.8	3.4

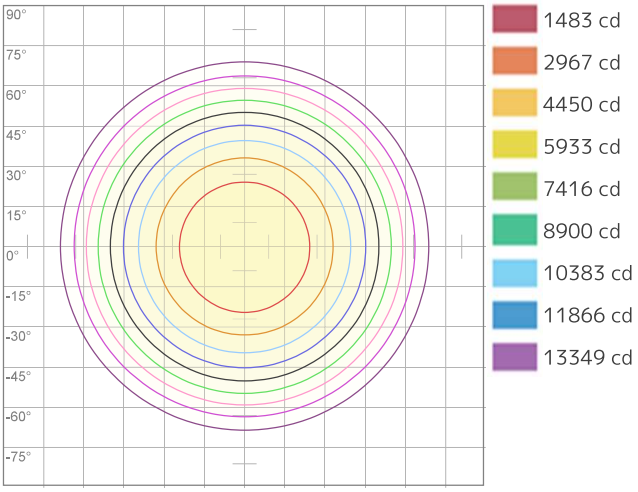
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
111.3°
Field Angle - 10%
152.8°
Cutoff Angle - 2.5%
165.8°

ISO Diagrams

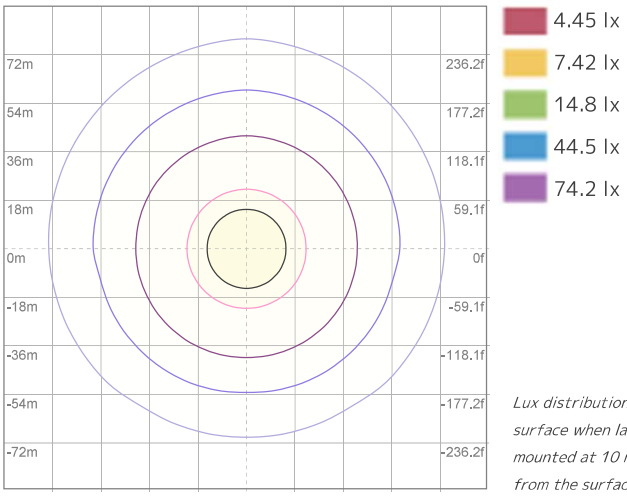


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 14833 cd



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

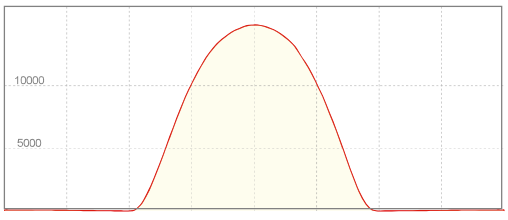
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 148 lx

Linear Distribution



Peak Candela

14837 cd

Calculate Center Beam Intensities

lux = 14837 / distance(m)^2

fc = 14837 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (No Diffusor, 8500K)

Prepared For ELATION PROFESSIONAL

Key Measurements

Output

Total Lumen Output: 38087 lm

Peak Intensity: 13731 cd

Beam

Beam Angle (50%): 111.6°

Field Angle (10%): 152.9°

Cutoff Angle (2.5%): 165.8°

Color

Color Temperature: 8468 K

CRI: 93.7

TLCI: 96

TM30 R_F: 89.9

TM30 R_g: 100.1

Power Details

Efficacy: 70 Lumen/Watt

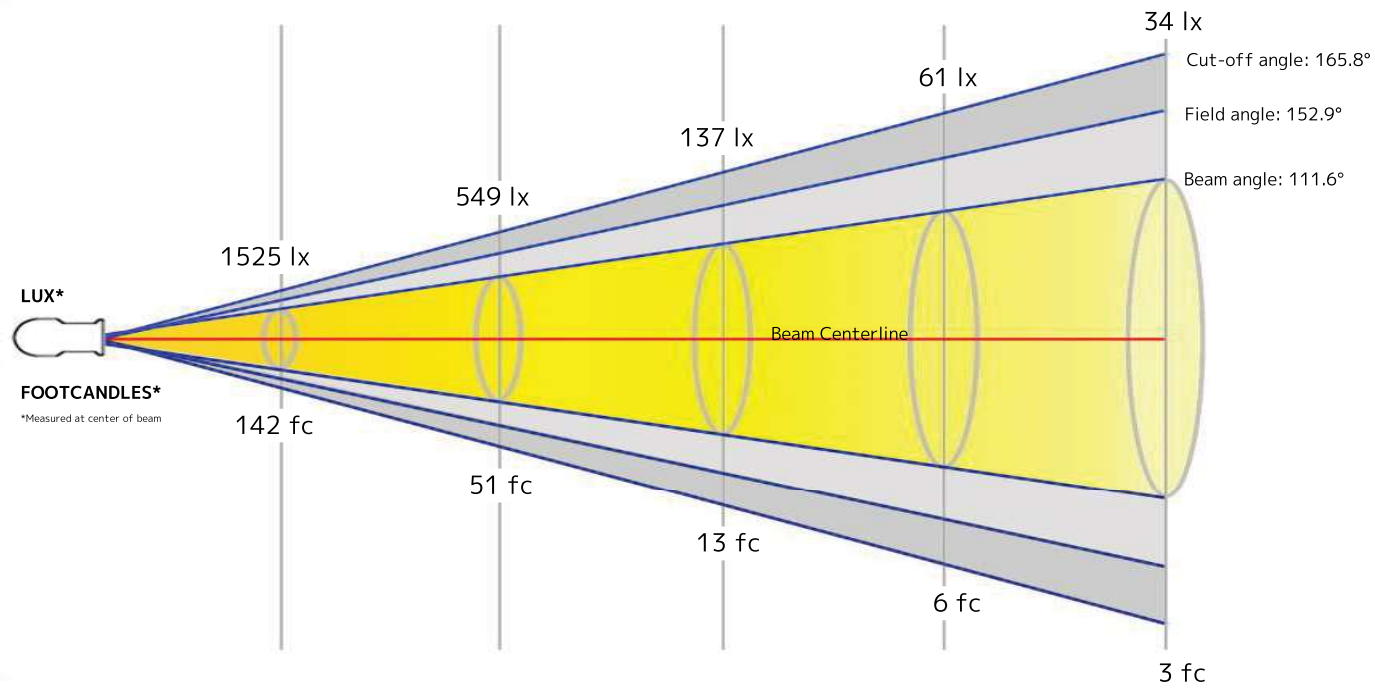
Power: 547 W

Supply Voltage: 118 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	8.8 m	14.7 m	29.5	44.2 m	58.9 m



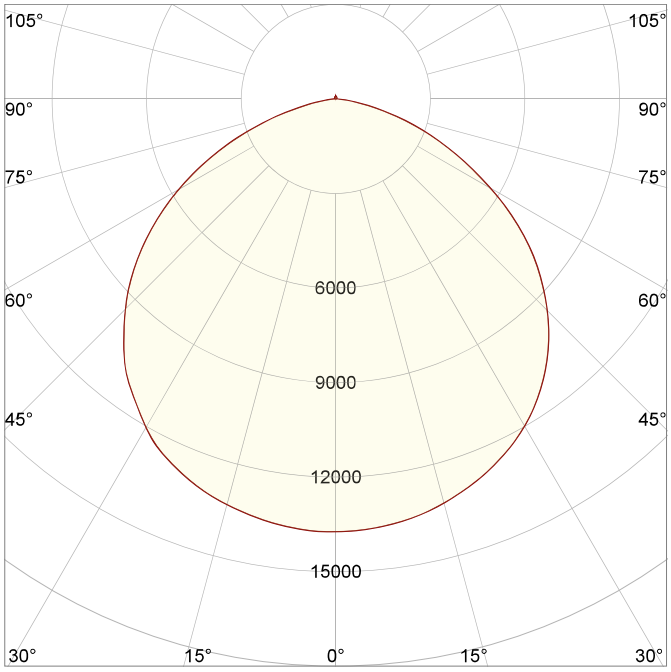
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	28.9 ft	48.3 ft	96.6 ft	144.9 ft	193.2 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	13725	3431	1525	858	549	381	280	214	169	137	113	95	81	70	61	54	47	42	38	34
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1275.1	318.8	141.7	79.7	51	35.4	26	19.9	15.7	12.8	10.5	8.9	7.5	6.5	5.7	5	4.4	3.9	3.5	3.2

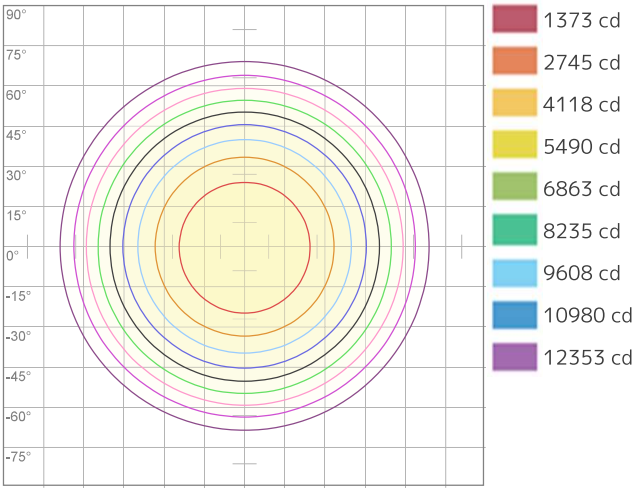
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
111.6°
Field Angle - 10%
152.9°
Cutoff Angle - 2.5%
165.8°

ISO Diagrams

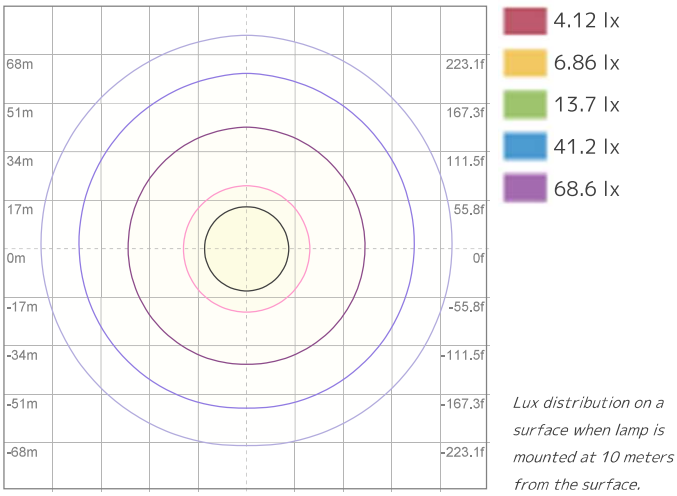


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 13725 cd



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

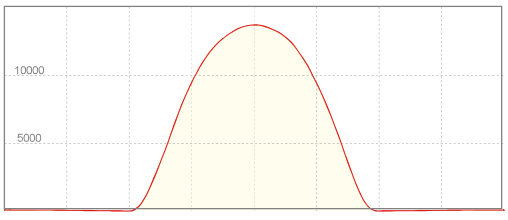
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 137 lx

Linear Distribution



Peak Candela

13731 cd

Calculate Center Beam Intensities

lux = 13731 / distance(m)^2

fc = 13731 / distance(ft)^2

Measurement Date: 9/28/2023

KL Panel XL IP (No Diffusor, 10000K)

Key Measurements

Output

Total Lumen Output: 37776 lm

Peak Intensity: 13631 cd

Beam

Beam Angle (50%): 111.7°

Field Angle (10%): 152.7°

Cutoff Angle (2.5%): 165.2°

Color

Color Temperature: 10075 K

CRI: 94.1

TLCI: 94

TM30 R_F: 89.0

TM30 R_g: 98.1

Power Details

Efficacy: 69 Lumen/Watt

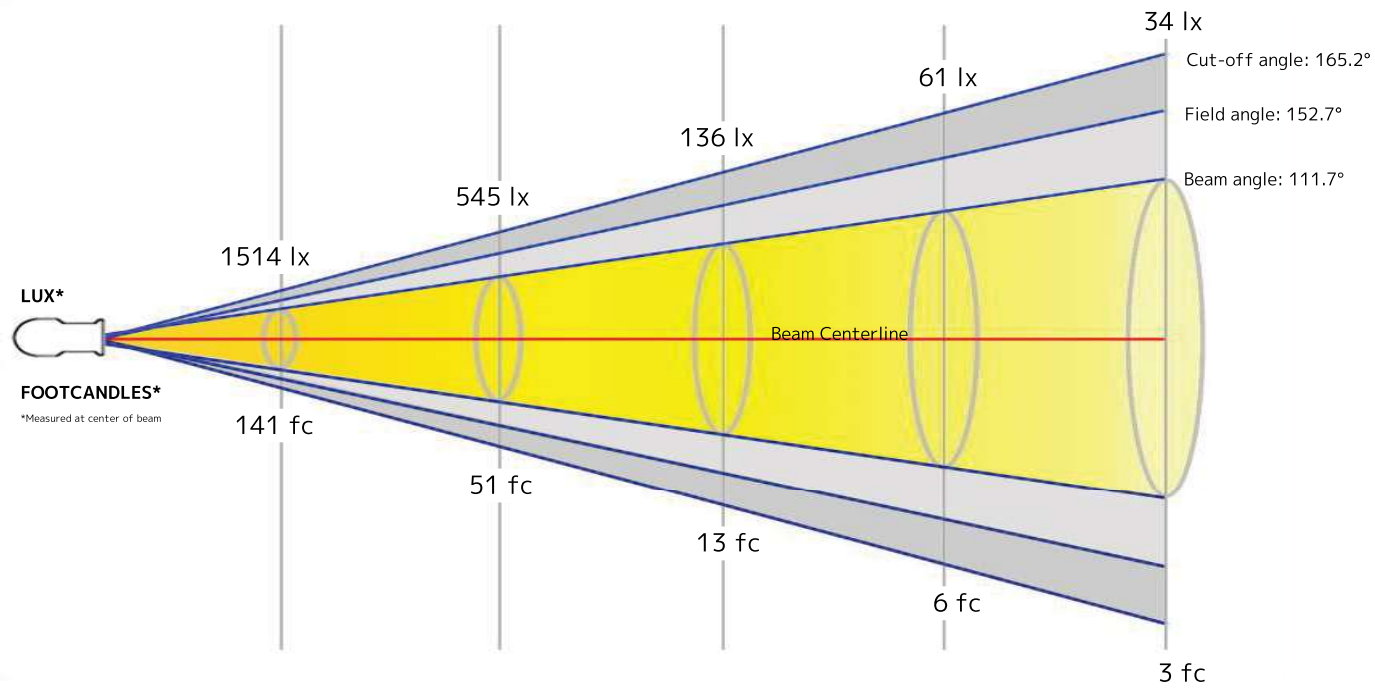
Power: 550 W

Supply Voltage: 118 V

Current: - A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	8.8 m	14.7 m	29.5	44.2 m	59 m



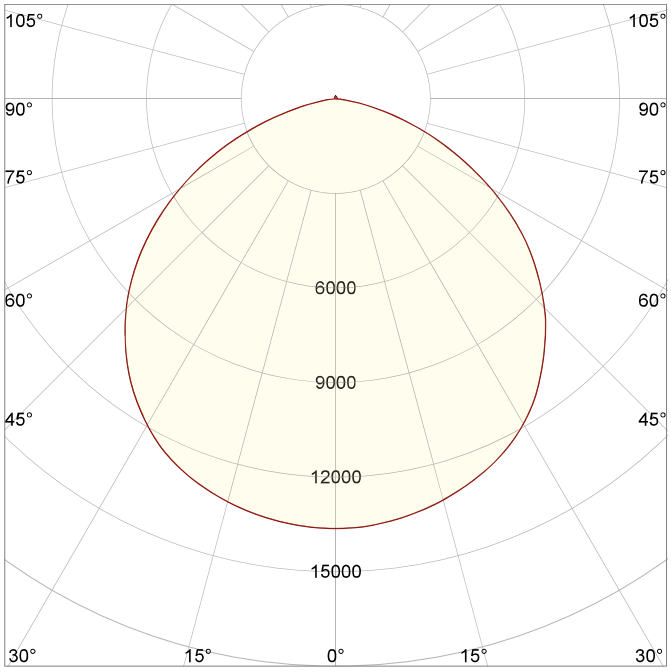
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	28.9 ft	48.4 ft	96.8 ft	145.1 ft	193.5 ft

Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
LX	13623	3406	1514	851	545	378	278	213	168	136	113	95	81	70	61	53	47	42	38	34
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
FC	1265.7	316.4	140.6	79.1	50.6	35.2	25.8	19.8	15.6	12.7	10.5	8.8	7.5	6.5	5.6	4.9	4.4	3.9	3.5	3.2

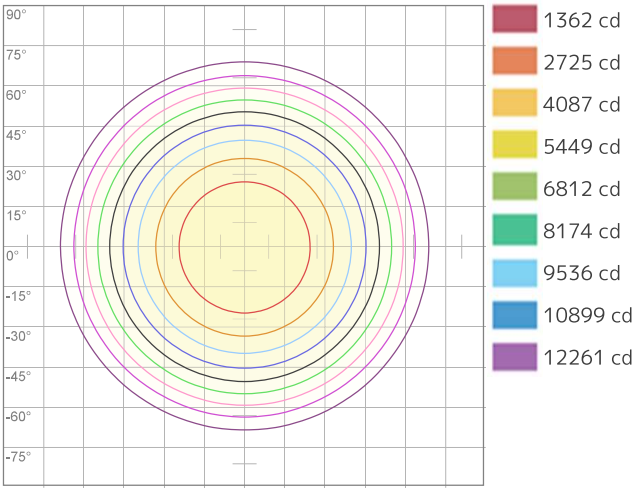
Measurement Date: 9/28/2023

Angular Distribution



Beam Angle - 50%
111.7°
Field Angle - 10%
152.7°
Cutoff Angle - 2.5%
165.2°

ISO Diagrams

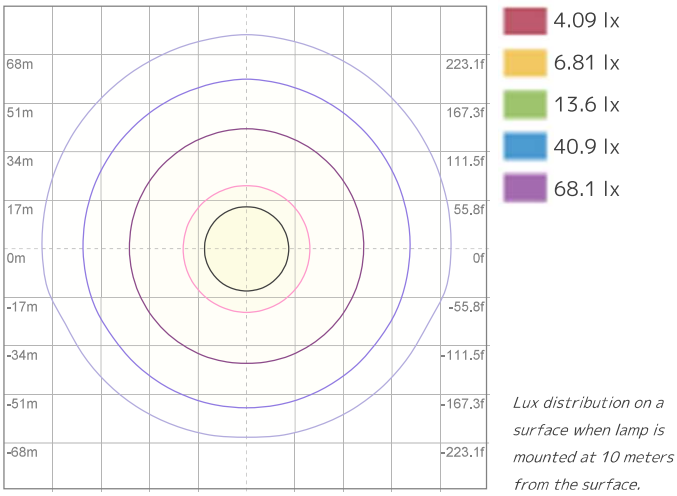


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 13623 cd



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

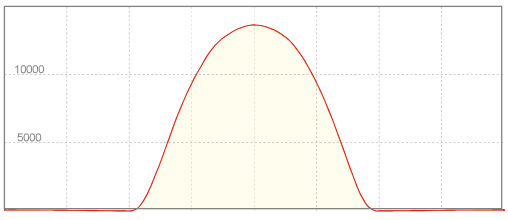
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 136 lx

Linear Distribution



Peak Candela

13631 cd

Calculate Center Beam Intensities

lux = 13631 / distance(m)^2

fc = 13631 / distance(ft)^2

Measurement Date: 9/28/2023

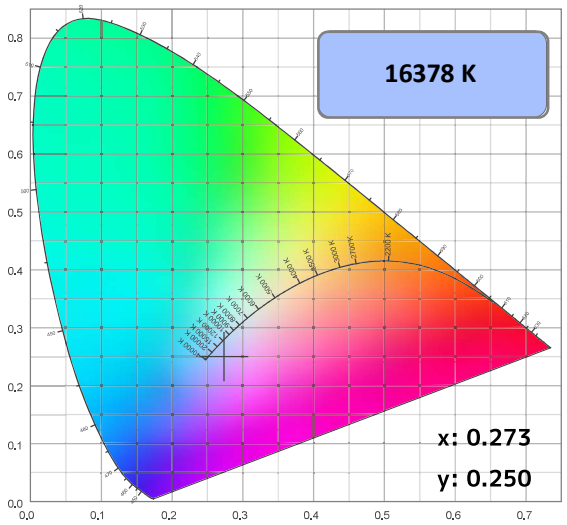
Prepared For ELATION PROFESSIONAL

Color Temperature: 16378K

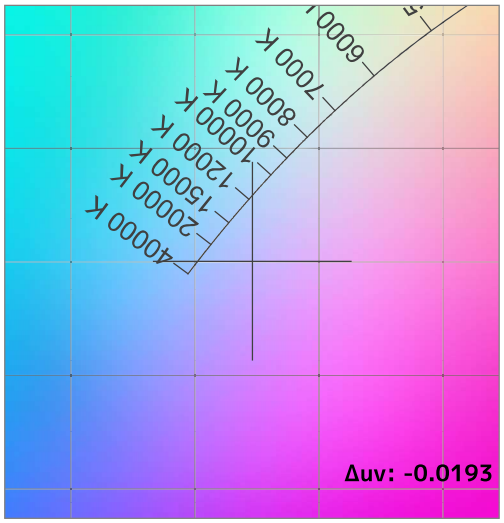
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
73.1	-50.2	78.7	104.5	92	88.1	0.273	0.250	-0.0193	-5	47

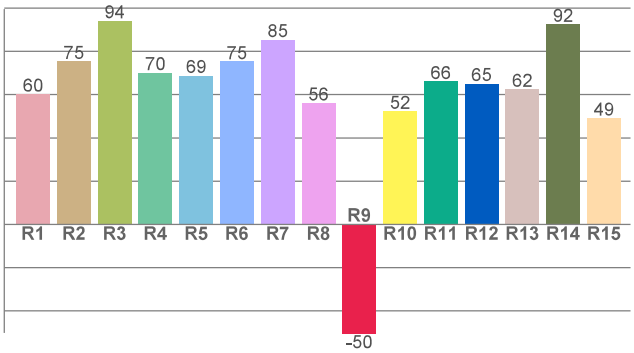
CIE 1931



CIE 1931 ZOOMED

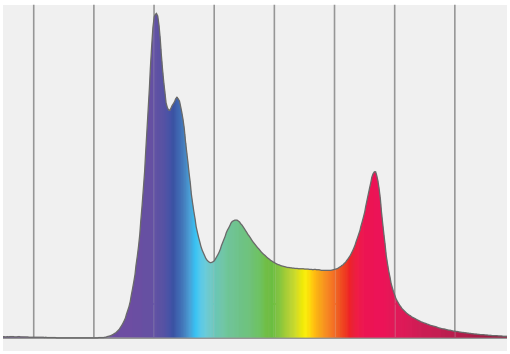


CRI: 73.1 (R1-R8)



Spectral Power Distribution (SPD)

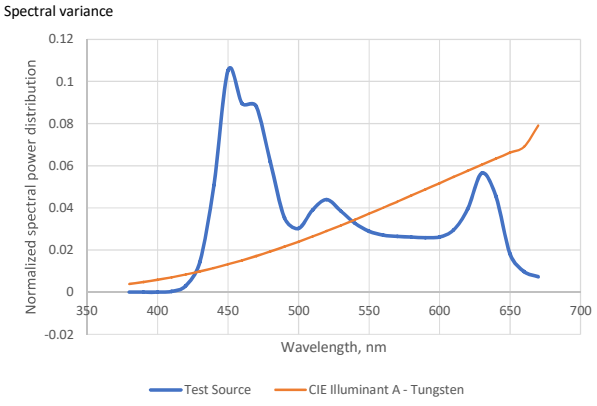
Dominant Wavelength 450 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] -5

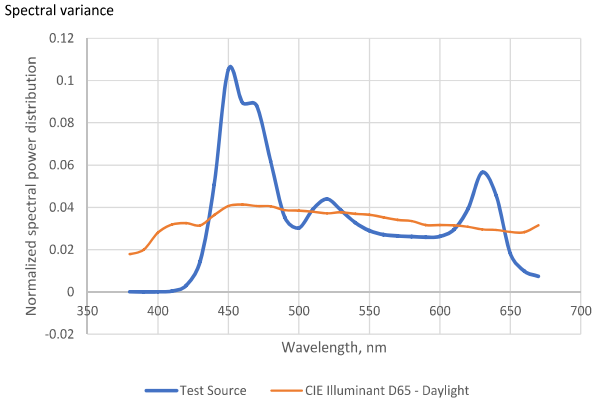
Spectral variance



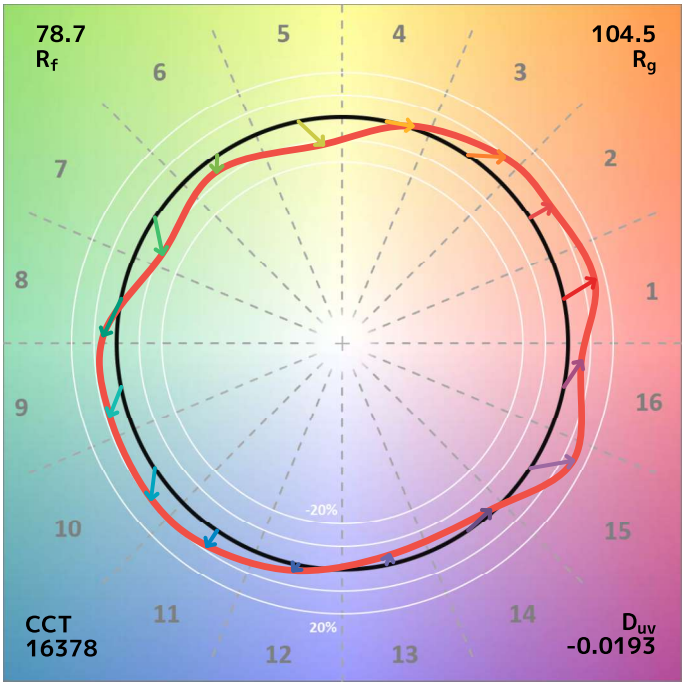
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 47

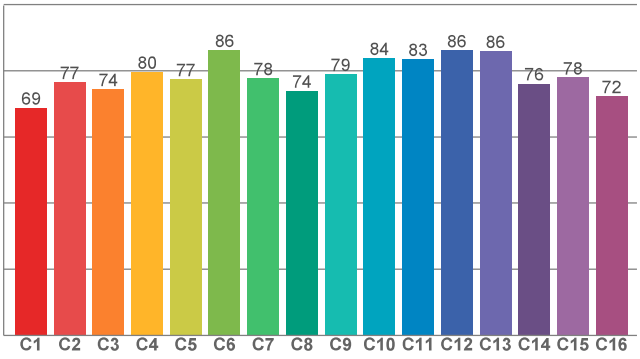
Spectral variance



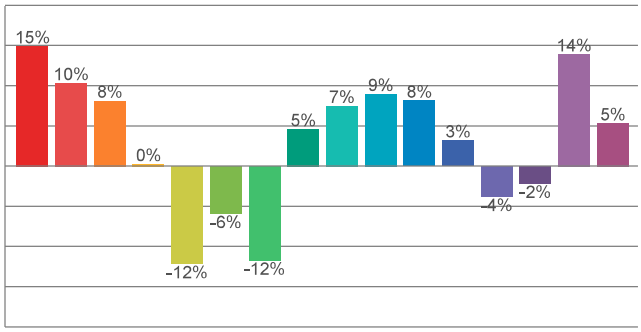
Measurement Date: 9/25/2023



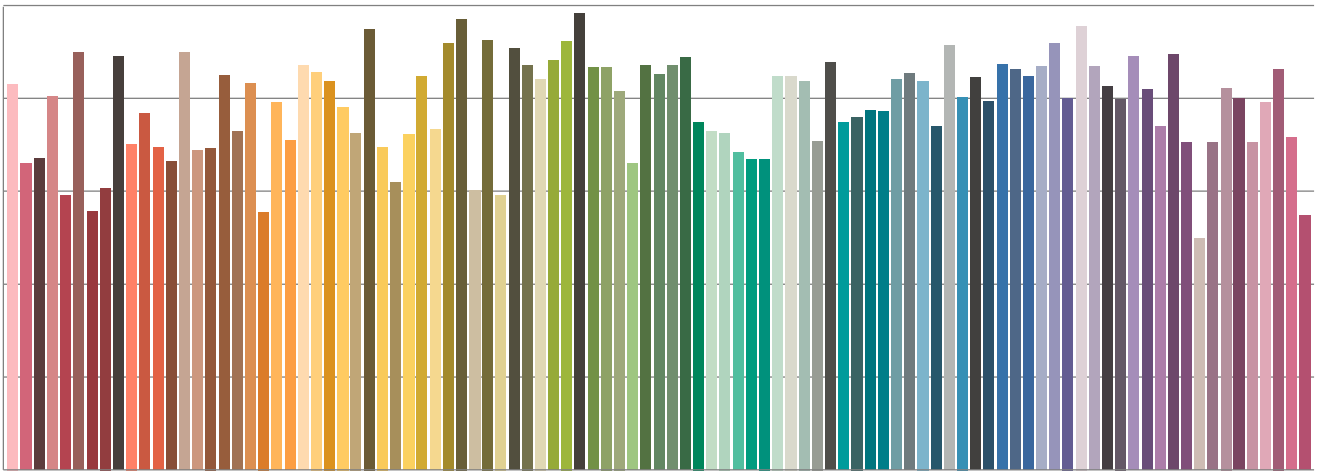
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



Measurement Date: 9/25/2023

KL Panel XL IP (2700K)

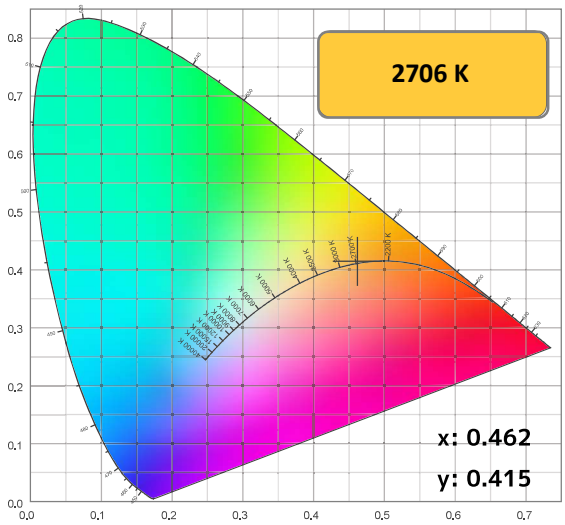
Prepared For ELATION PROFESSIONAL

Color Temperature: 2706K

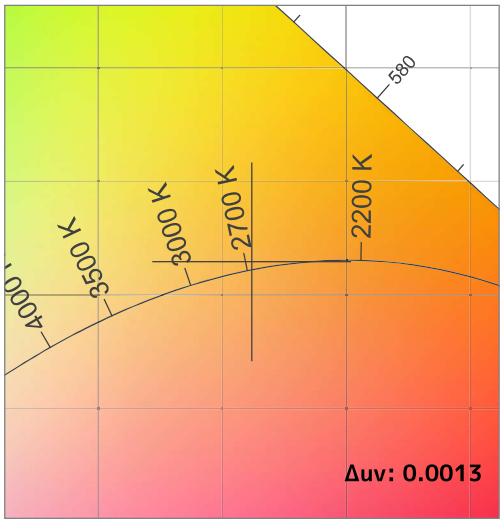
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
92.9	95.8	90.0	106.6	79	89.8	0.462	0.415	0.0013	62	17

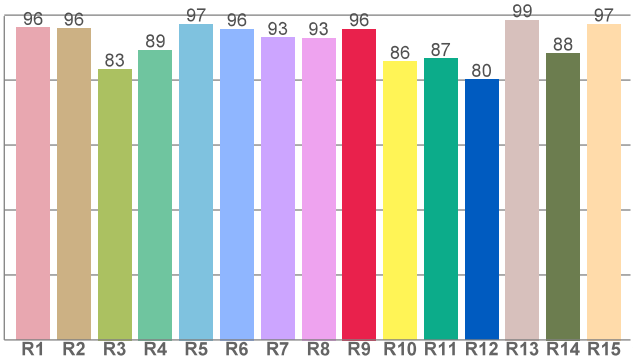
CIE 1931



CIE 1931 ZOOMED

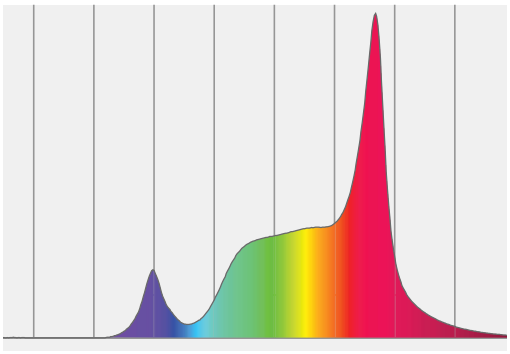


CRI: 92.9 (R1-R8)



Spectral Power Distribution (SPD)

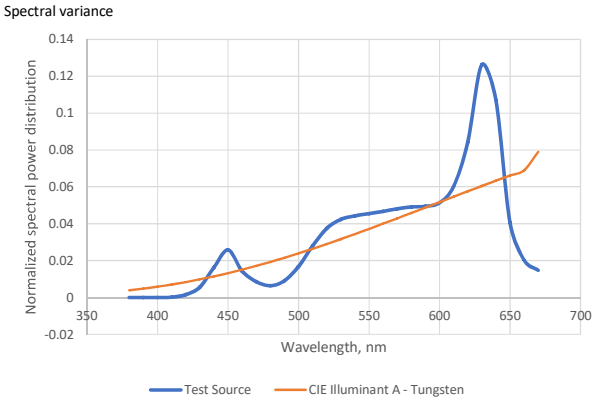
Dominant Wavelength 584 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 62

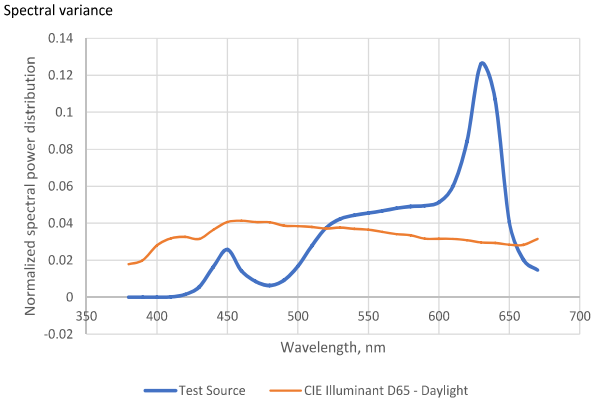
Spectral variance



SSI Spectral Variance Graph- Daylight

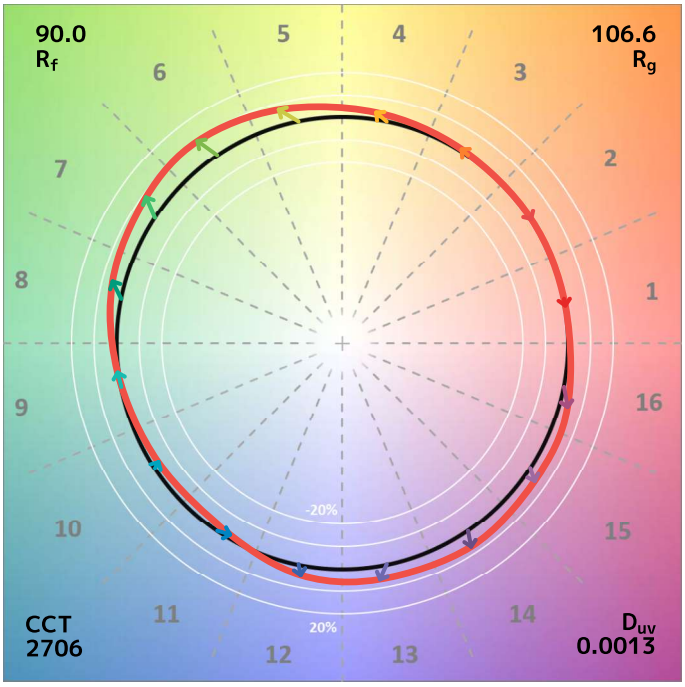
SSI [CIE D65] 17

Spectral variance

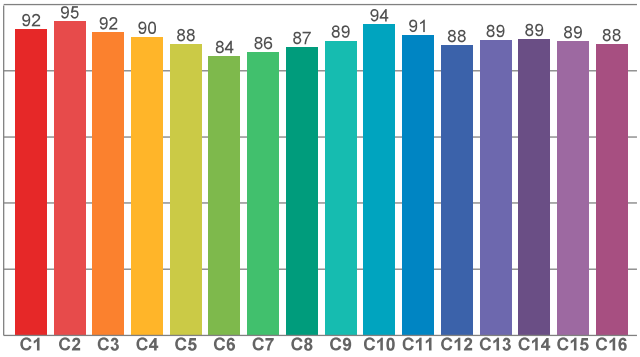


Measurement Date: 9/25/2023

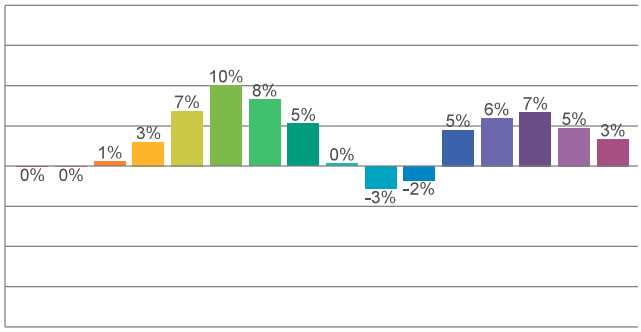
Prepared For ELATION PROFESSIONAL



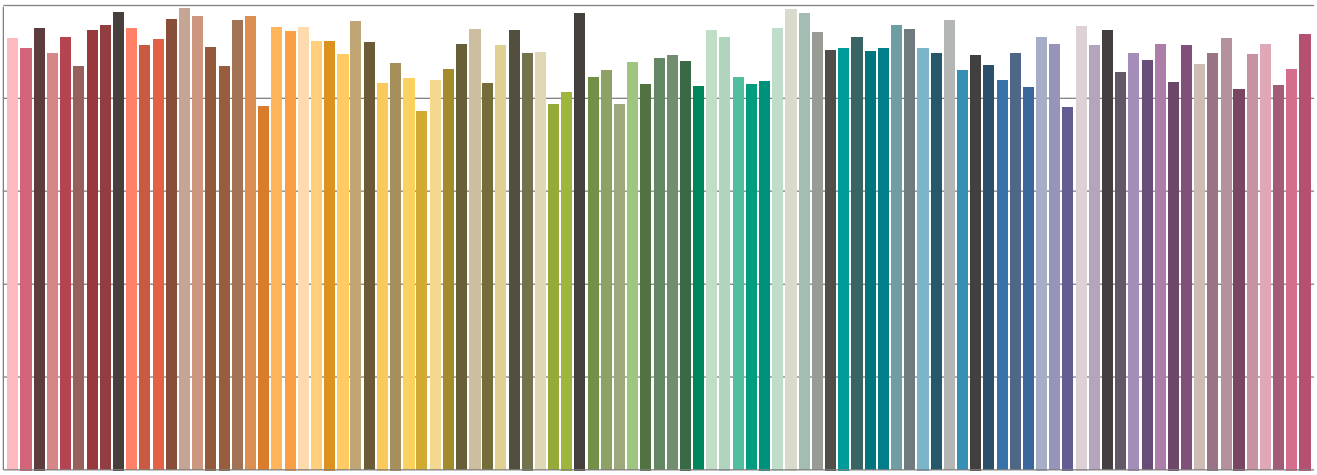
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



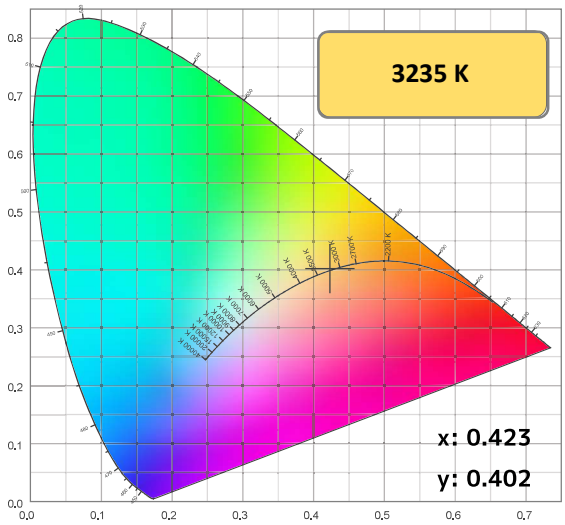
Measurement Date: 9/25/2023

Color Temperature: 3235K

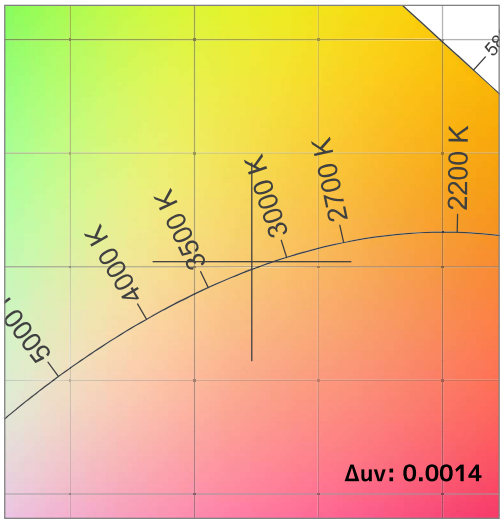
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
90.6	80.4	90.7	107.5	83	91.4	0.423	0.402	0.0014	62	29

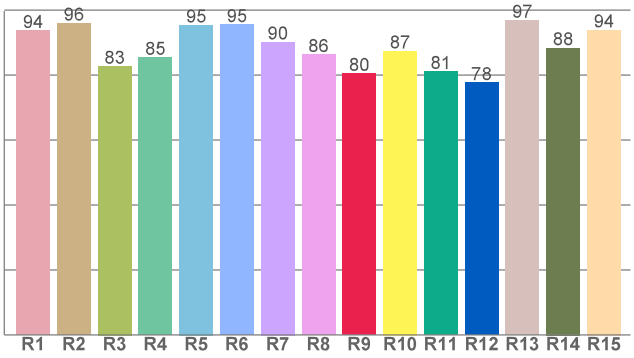
CIE 1931



CIE 1931 ZOOMED

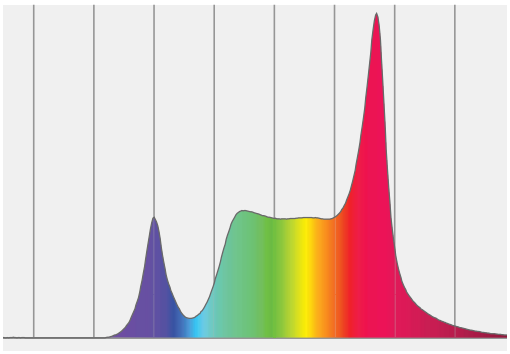


CRI: 90.6 (R1-R8)



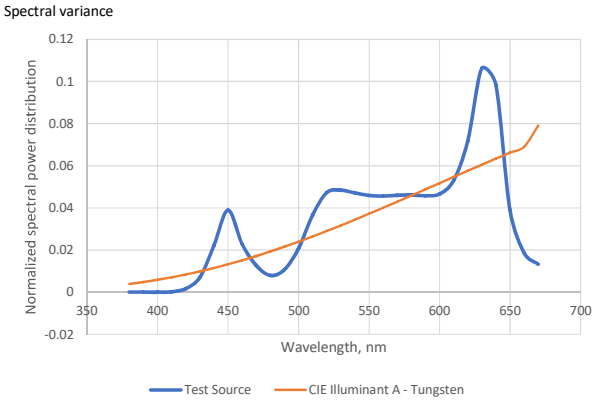
Spectral Power Distribution (SPD)

Dominant Wavelength 582 nm



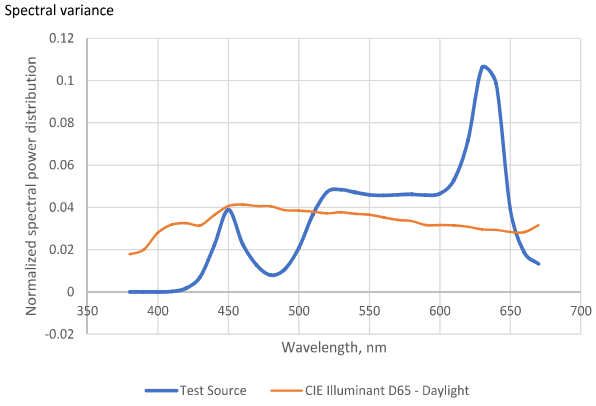
SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 62



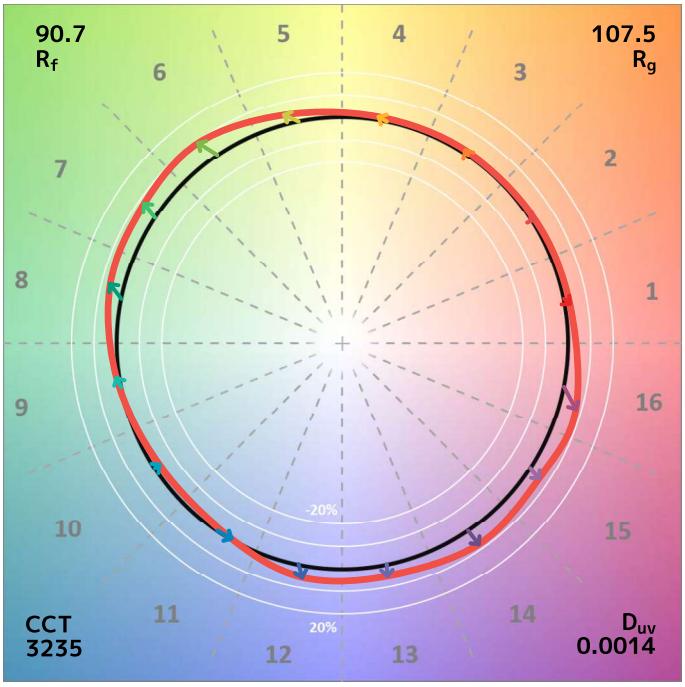
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 29

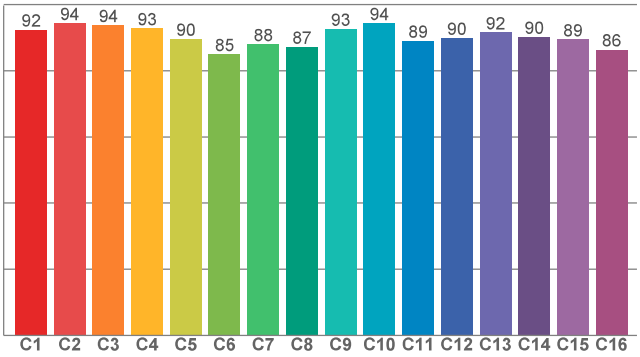


Measurement Date: 9/25/2023

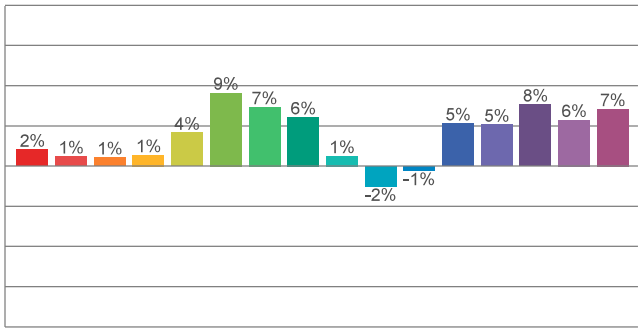
Prepared For ELATION PROFESSIONAL



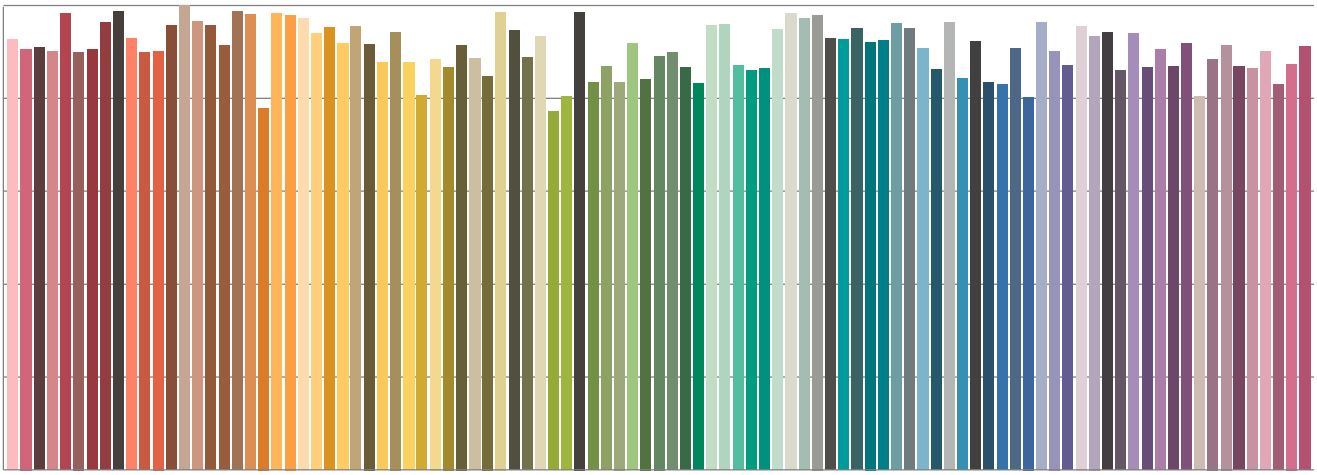
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



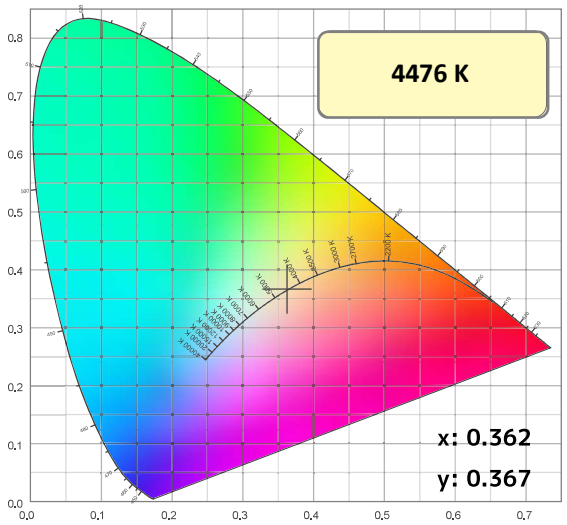
Measurement Date: 9/25/2023

Color Temperature: 4476K

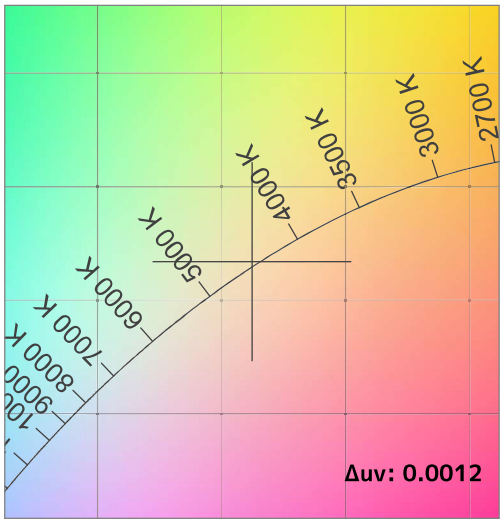
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
92.0	86.2	90.7	106.3	88	93.2	0.362	0.367	0.0012	47	49

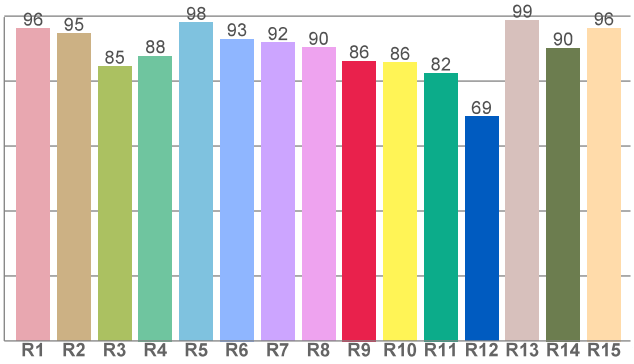
CIE 1931



CIE 1931 ZOOMED

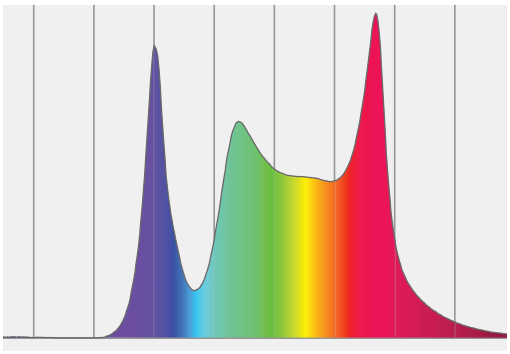


CRI: 92.0 (R1-R8)



Spectral Power Distribution (SPD)

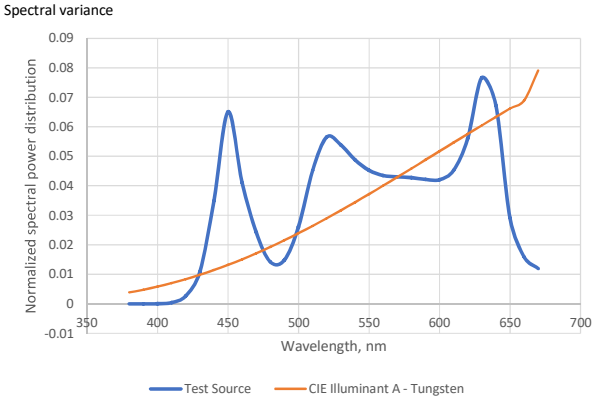
Dominant Wavelength 580 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 47

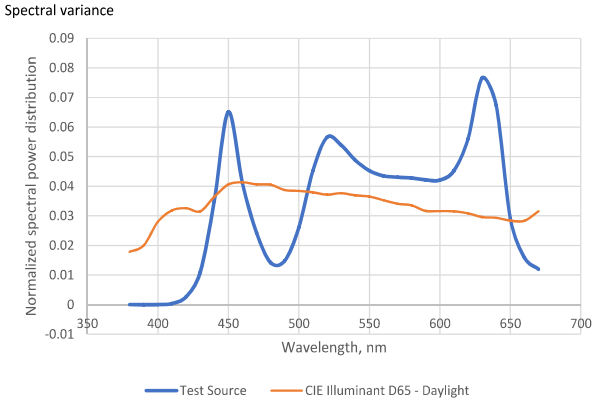
Spectral variance



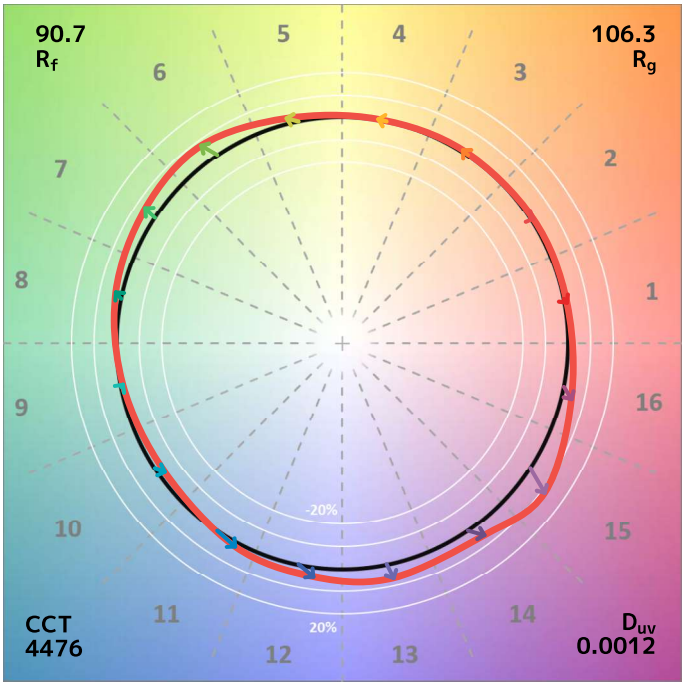
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 49

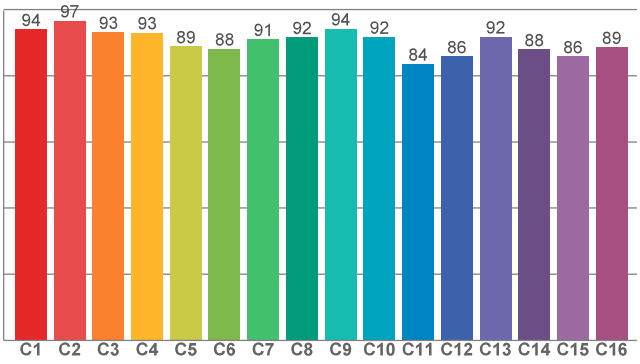
Spectral variance



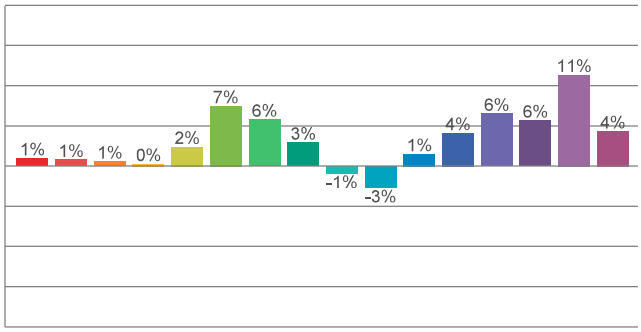
Measurement Date: 9/25/2023



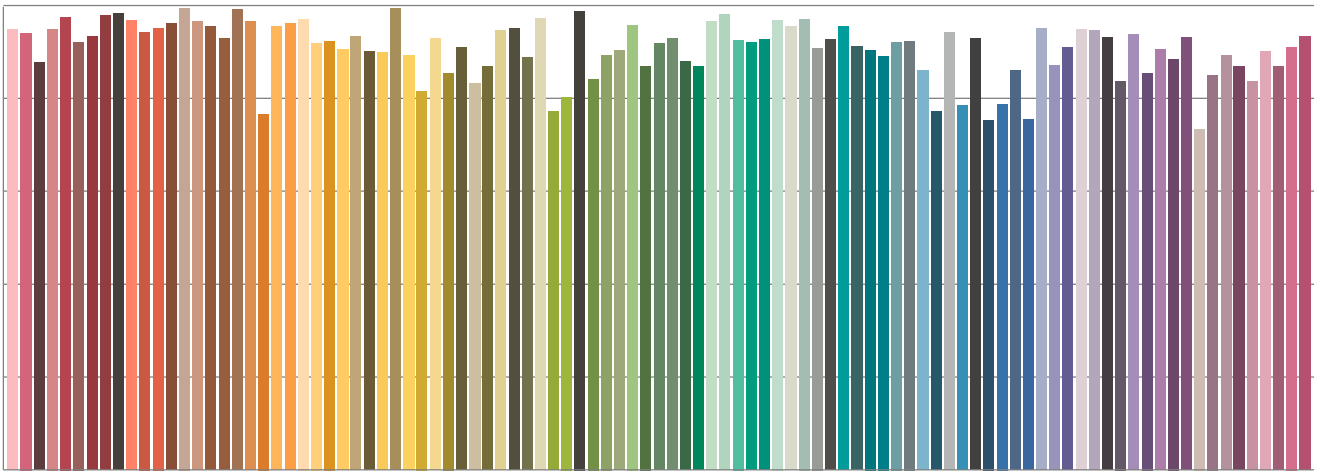
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



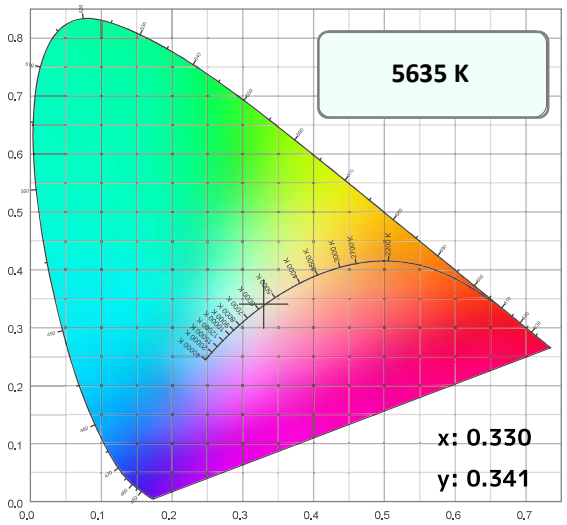
Measurement Date: 9/25/2023

Color Temperature: 5635K

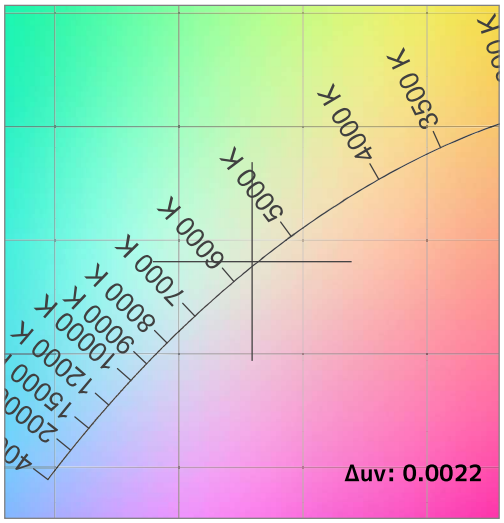
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
91.6	91.4	89.7	105.9	90	91.9	0.330	0.341	0.0022	31	54

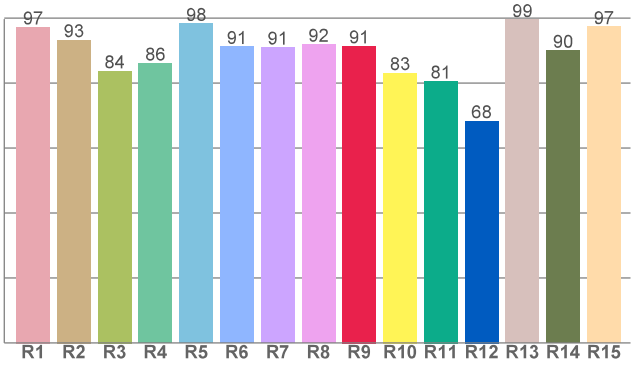
CIE 1931



CIE 1931 ZOOMED

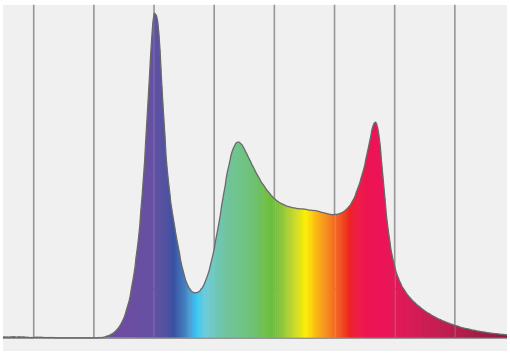


CRI: 91.6 (R1-R8)



Spectral Power Distribution (SPD)

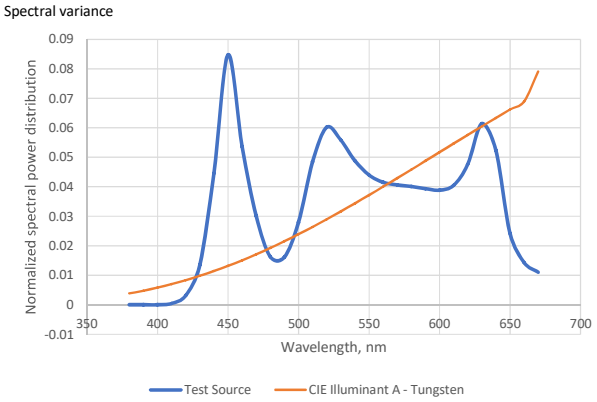
Dominant Wavelength 582 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 31

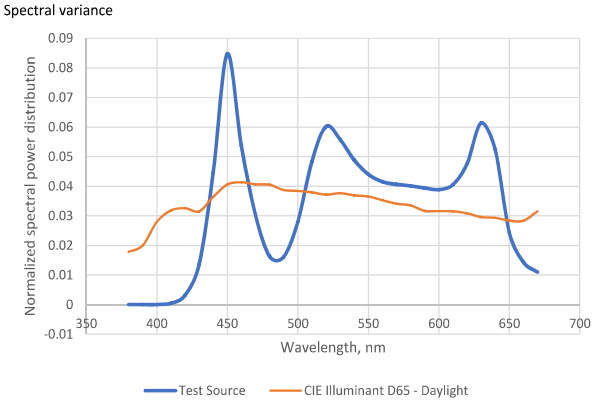
Spectral variance



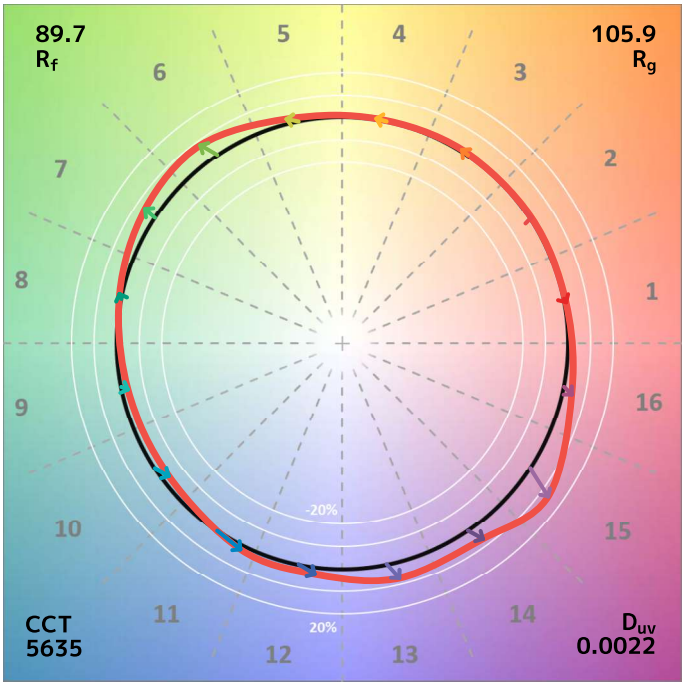
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 54

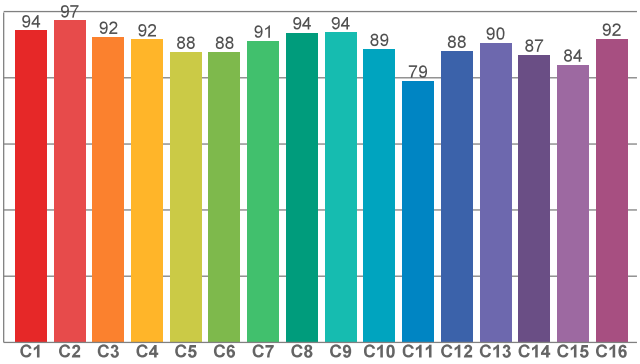
Spectral variance



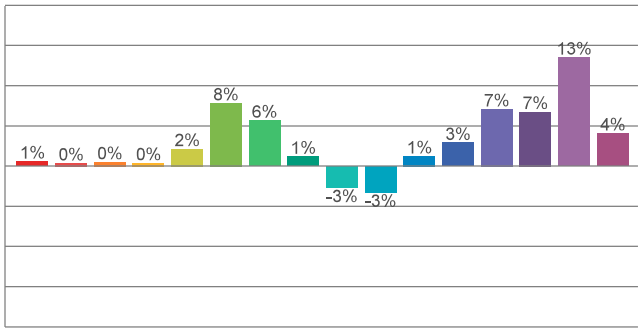
Measurement Date: 9/25/2023



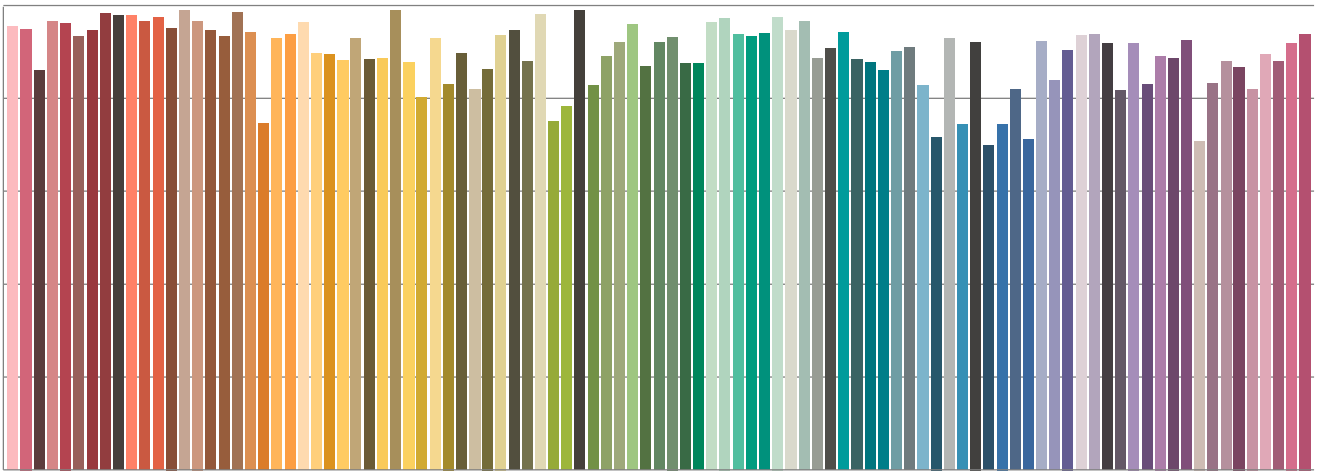
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



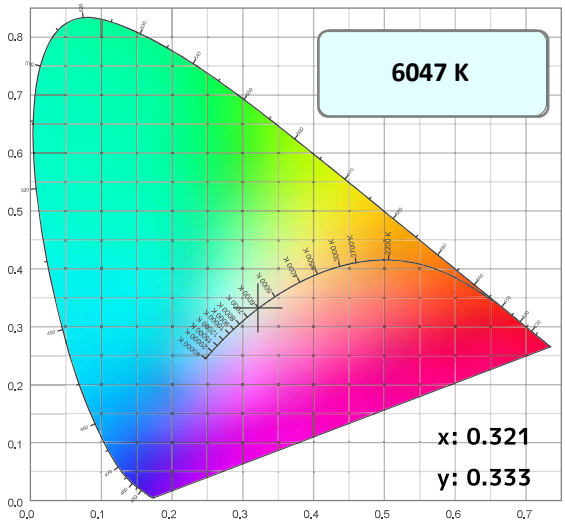
Measurement Date: 9/25/2023

Color Temperature: 6047K

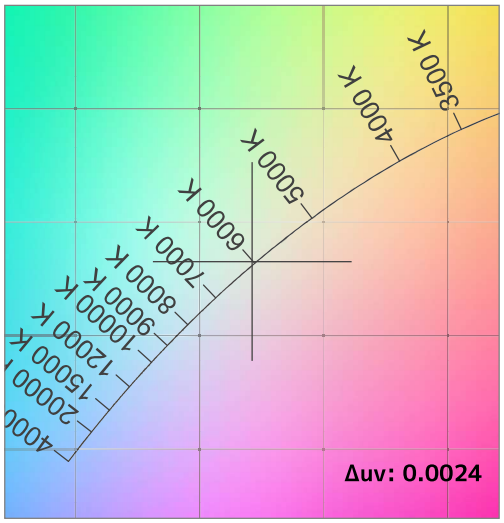
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
91.2	91.3	89.3	106.2	89	91.8	0.321	0.333	0.0024	25	54

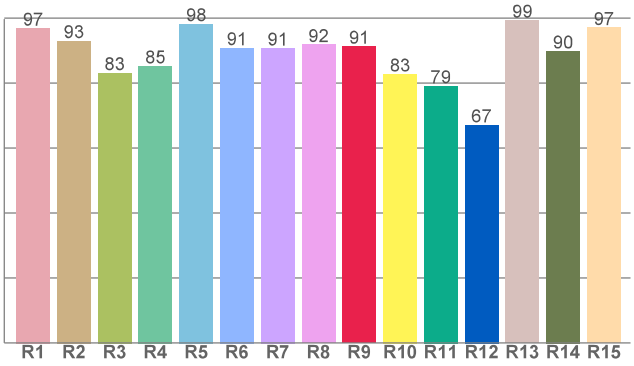
CIE 1931



CIE 1931 ZOOMED

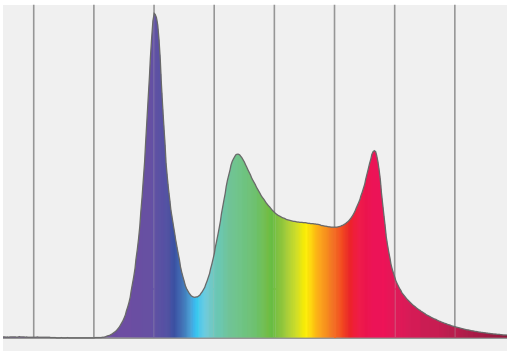


CRI: 91.2 (R1-R8)



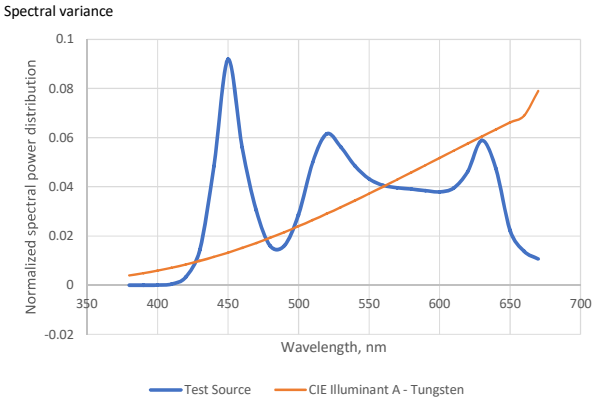
Spectral Power Distribution (SPD)

Dominant Wavelength 588 nm



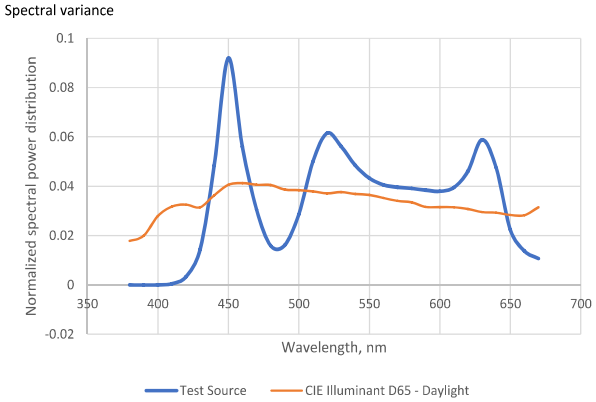
SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 25

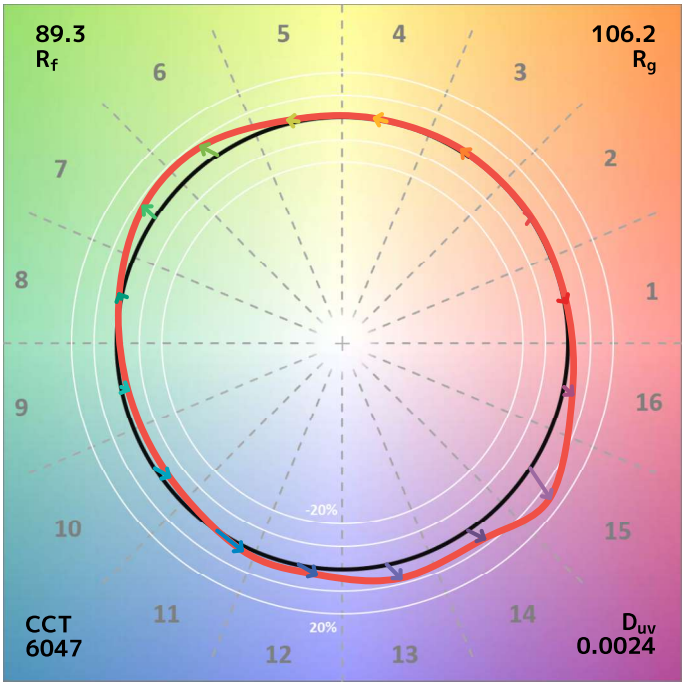


SSI Spectral Variance Graph- Daylight

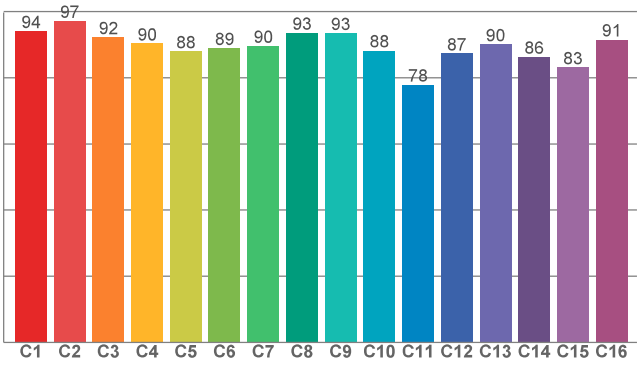
SSI [CIE D65] 54



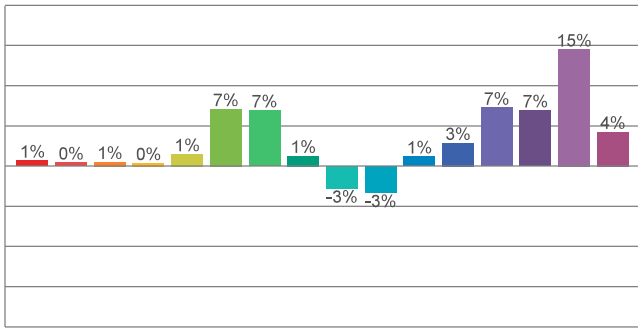
Measurement Date: 9/26/2023



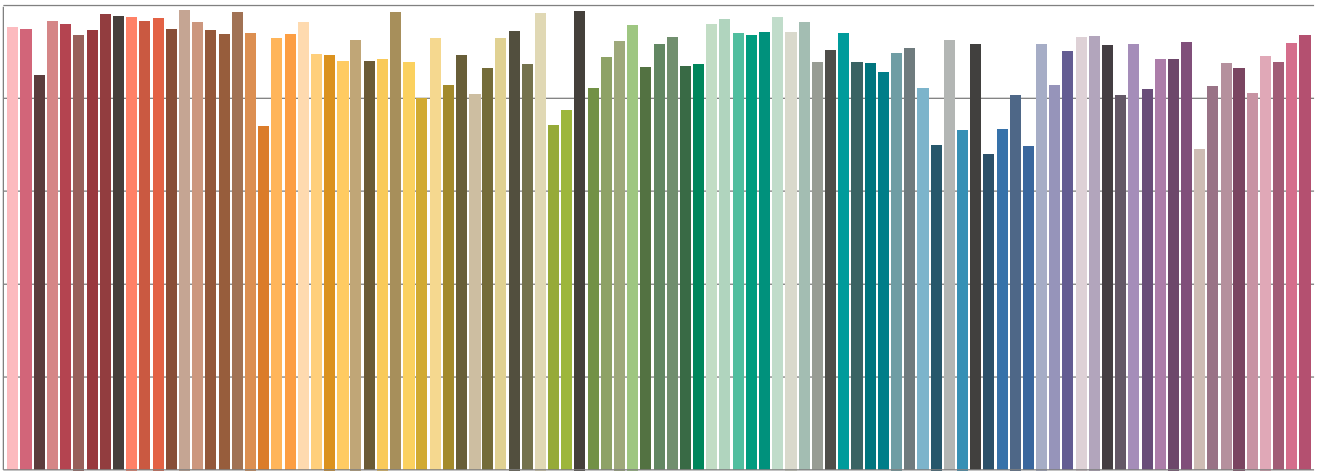
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



Measurement Date: 9/26/2023

KL Panel XL IP (6500K)

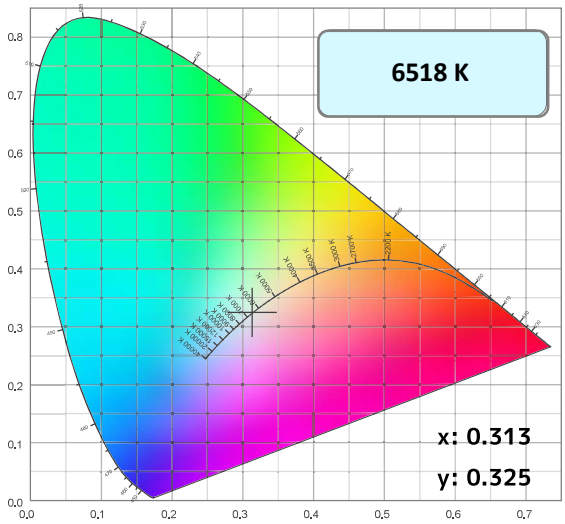
Prepared For ELATION PROFESSIONAL

Color Temperature: 6518K

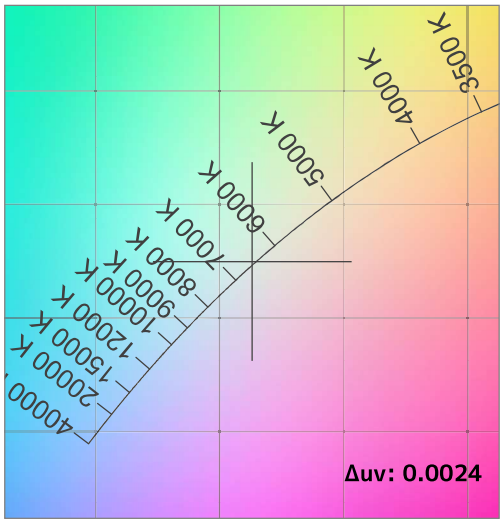
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
92.9	88.2	90.6	104.6	93	93.0	0.313	0.325	0.0024	23	56

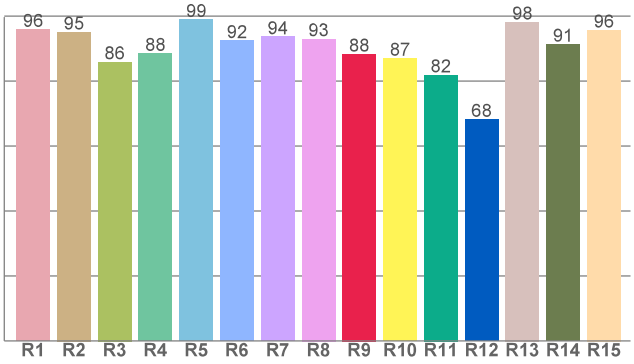
CIE 1931



CIE 1931 ZOOMED

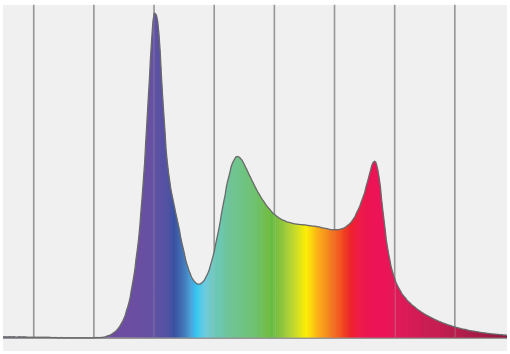


CRI: 92.9 (R1-R8)



Spectral Power Distribution (SPD)

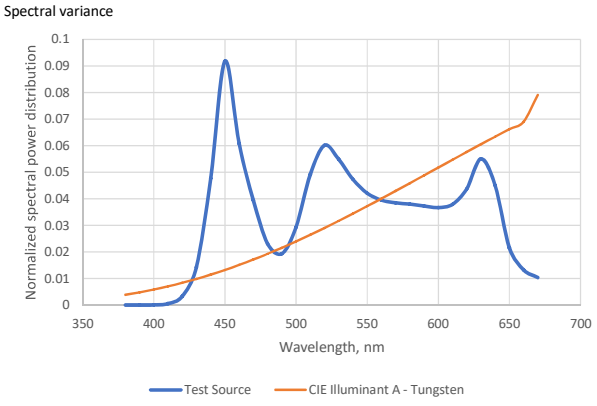
Dominant Wavelength 360 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 23

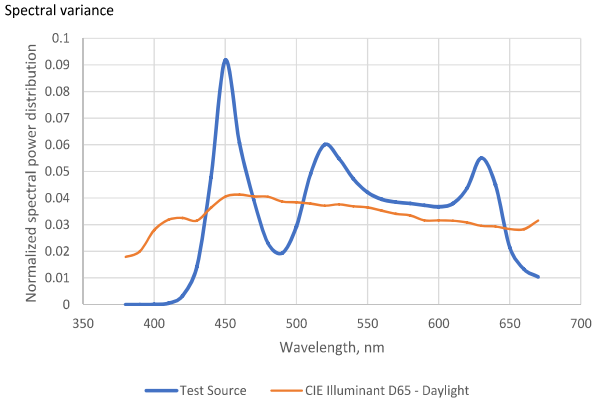
Spectral variance



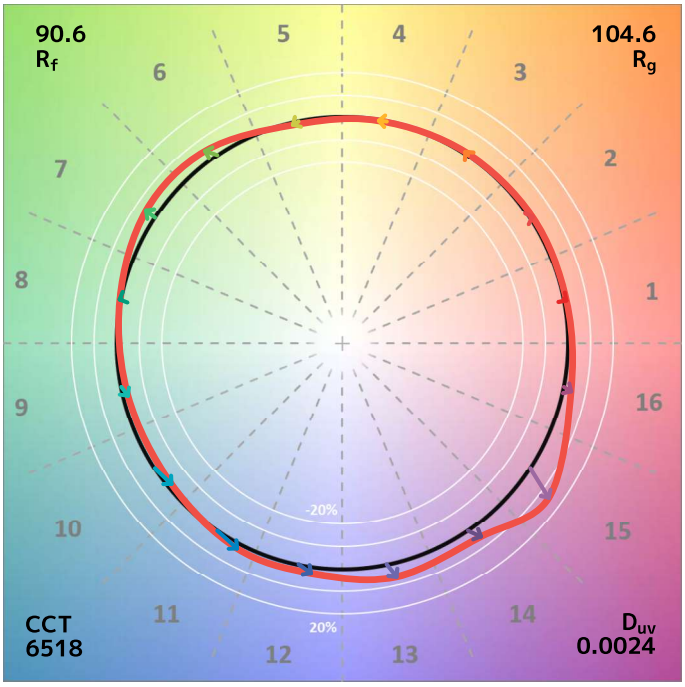
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 56

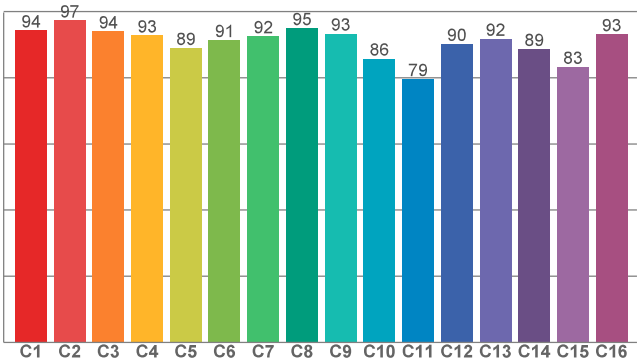
Spectral variance



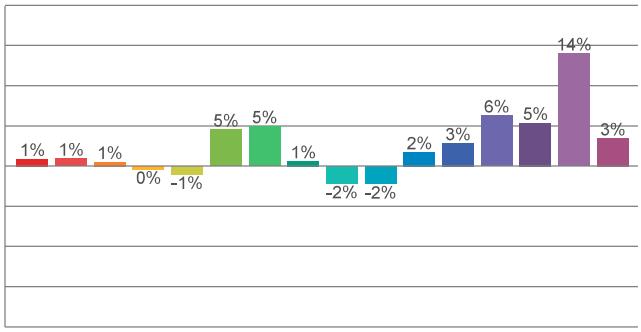
Measurement Date: 9/26/2023



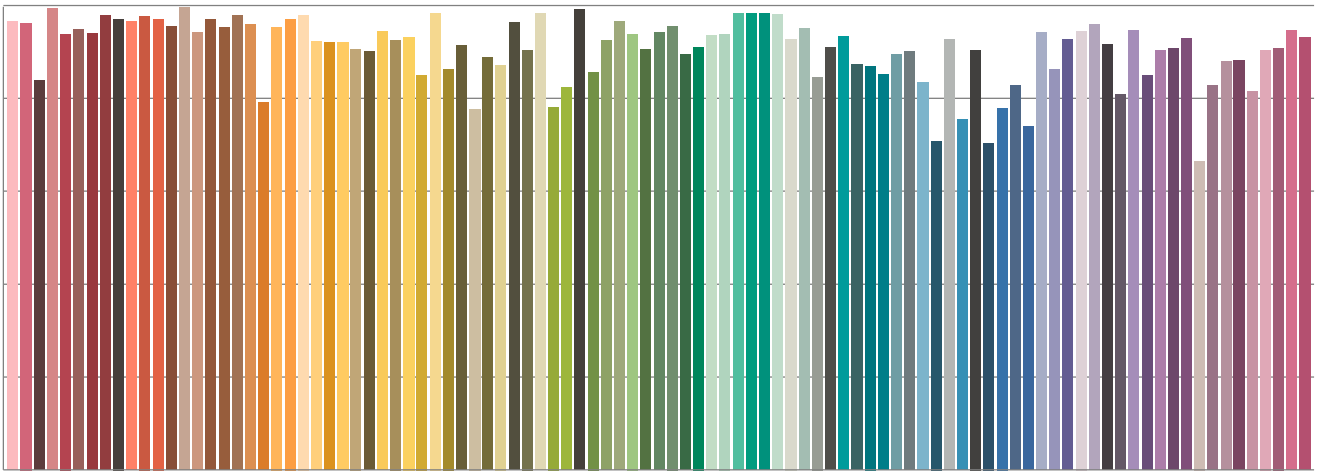
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



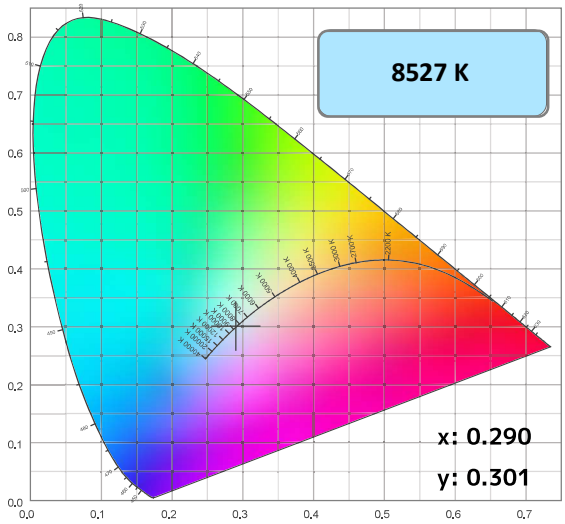
Measurement Date: 9/26/2023

Color Temperature: 8527K

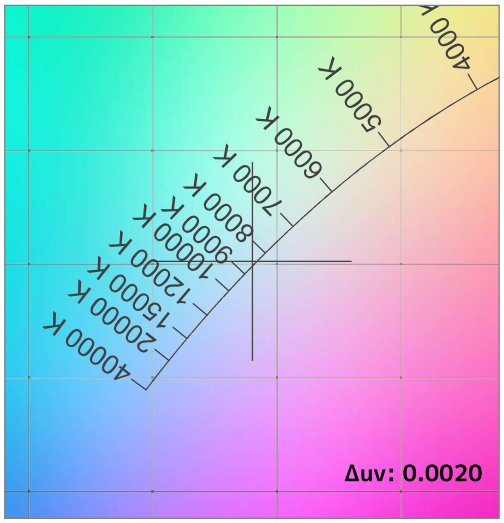
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
93.7	71.9	89.5	99.7	95	94.3	0.290	0.301	0.0020	15	59

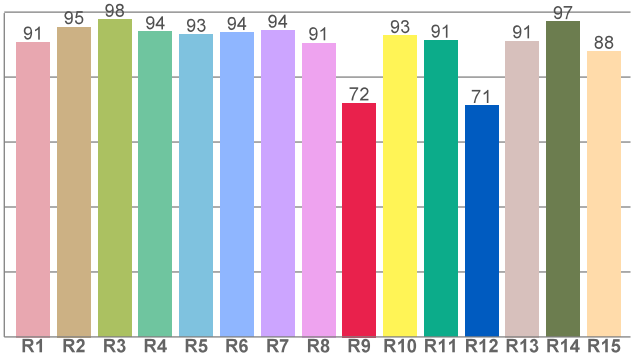
CIE 1931



CIE 1931 ZOOMED

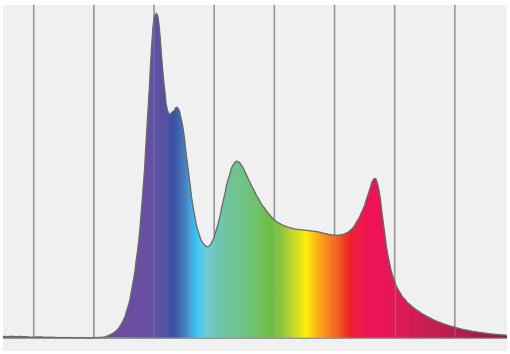


CRI: 93.7 (R1-R8)



Spectral Power Distribution (SPD)

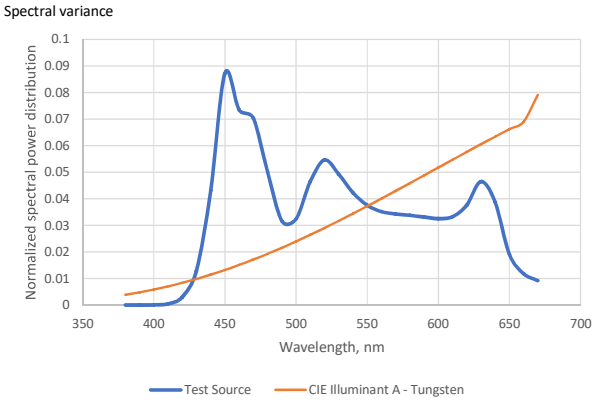
Dominant Wavelength 474 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 15

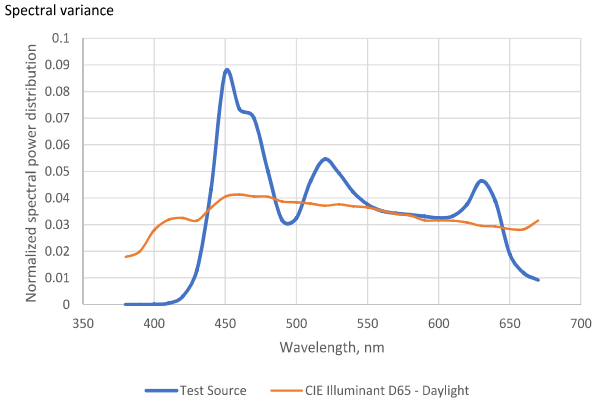
Spectral variance



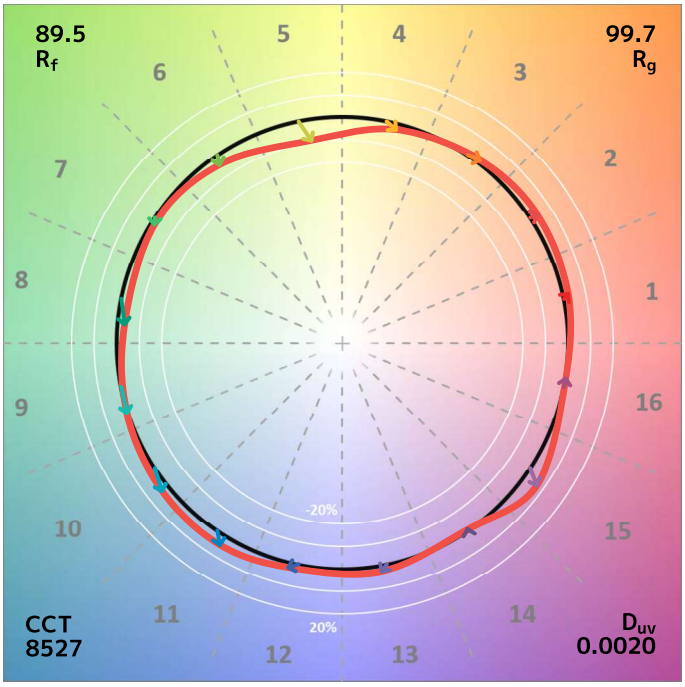
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 59

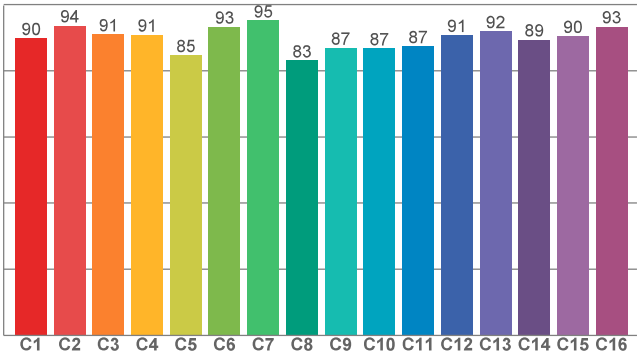
Spectral variance



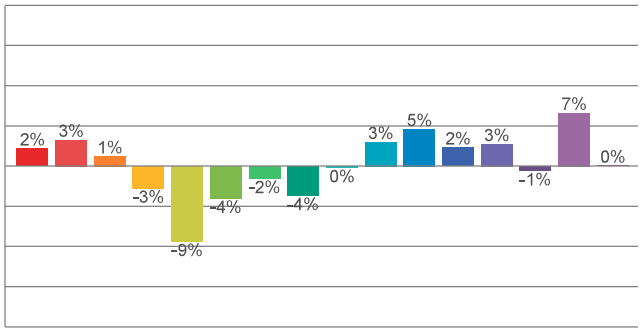
Measurement Date: 9/26/2023



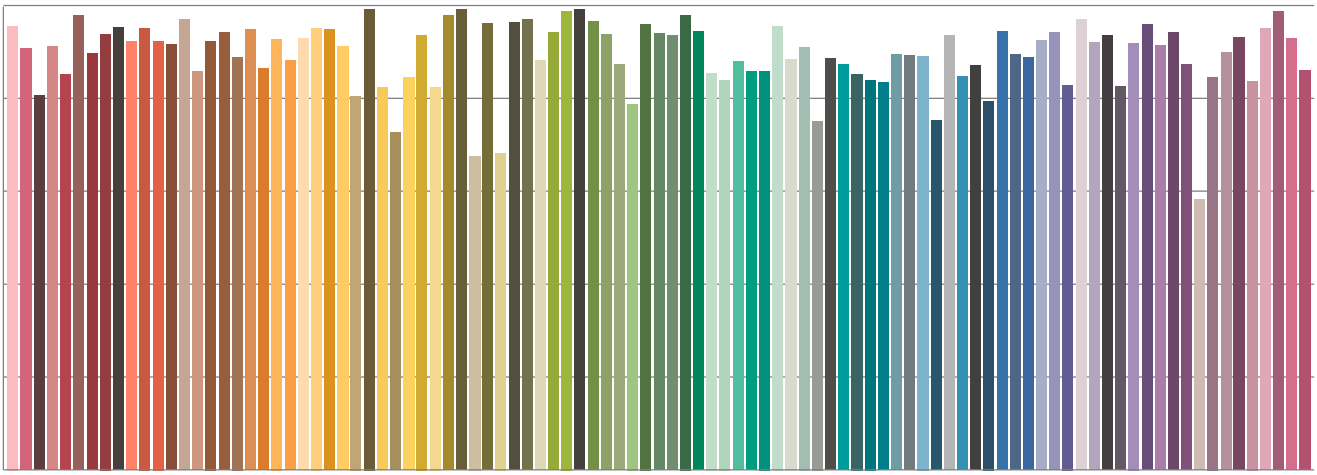
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



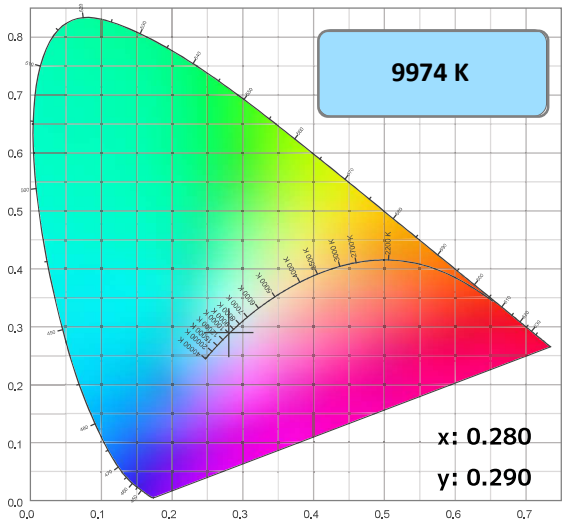
Measurement Date: 9/26/2023

Color Temperature: 9974K

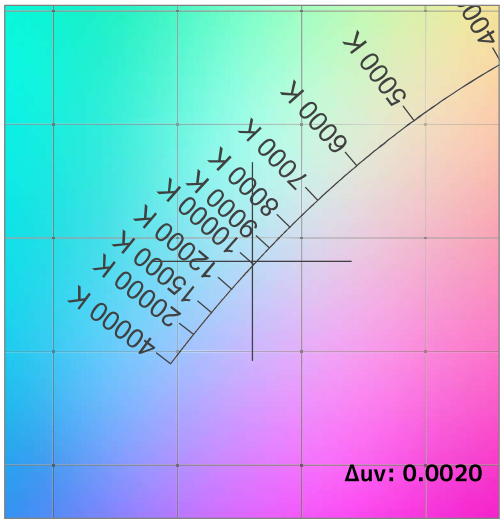
Accuracy Metric Overview

Color Rendering Index	Color Rendering Index, R9 (Red Component)	TM-30 Color Fidelity	TM-30 Color Gamut	Television Lighting Consistency Index	Color Quality Scale	Color Coordinate-CIE 1931	Color Coordinate-CIE 1931	Deviation from Black Body Locus	SSI [CIE A] Tungsten	SSI [CIE D65] Daylight
CRI	CRI R9	TM30 R_f	TM30 R_g	TLCI	CQS	x	Y	Δuv	SSIt	SSId
94.6	83.1	89.2	97.8	94	93.8	0.280	0.290	0.0020	7	56

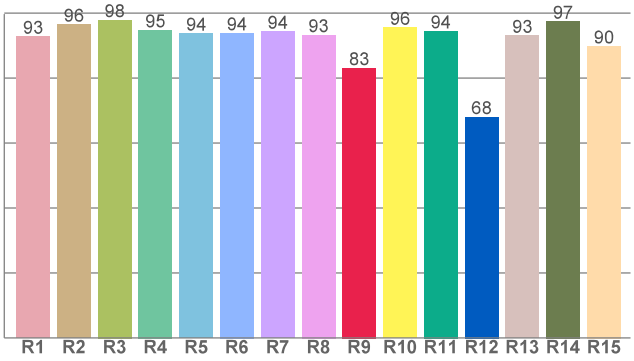
CIE 1931



CIE 1931 ZOOMED

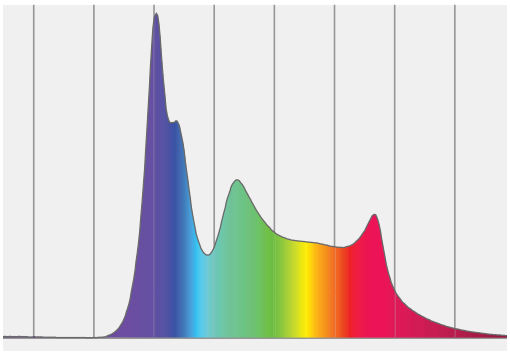


CRI: 94.6 (R1-R8)



Spectral Power Distribution (SPD)

Dominant Wavelength 475 nm



SSI Spectral Variance Graph- Tungsten

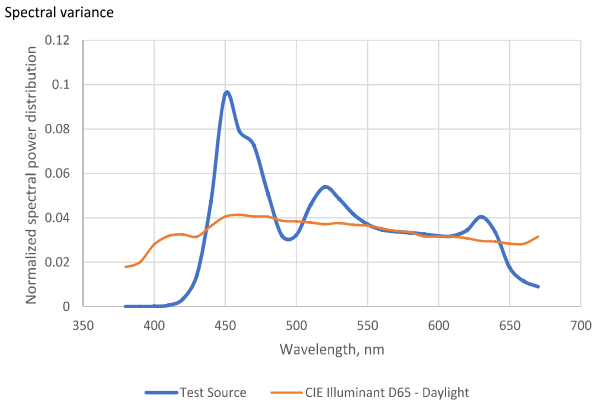
SSI [CIE A] 7

Spectral variance

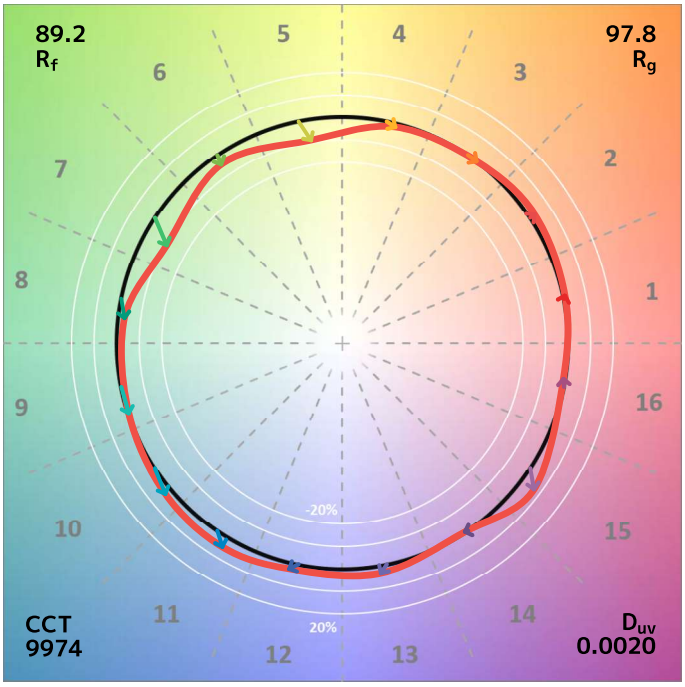
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 56

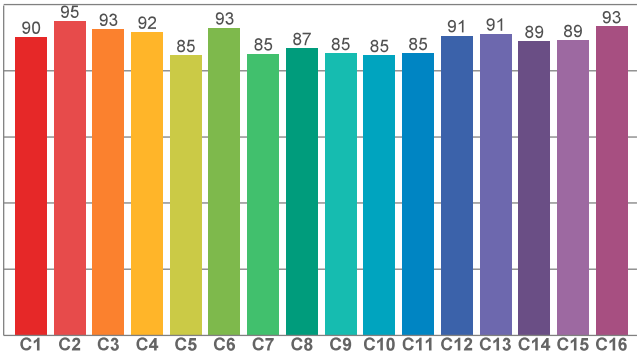
Spectral variance



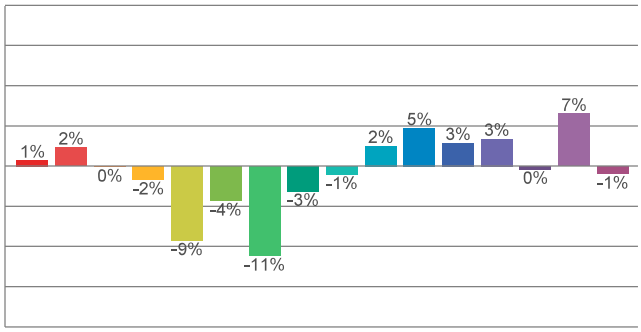
Measurement Date: 9/26/2023



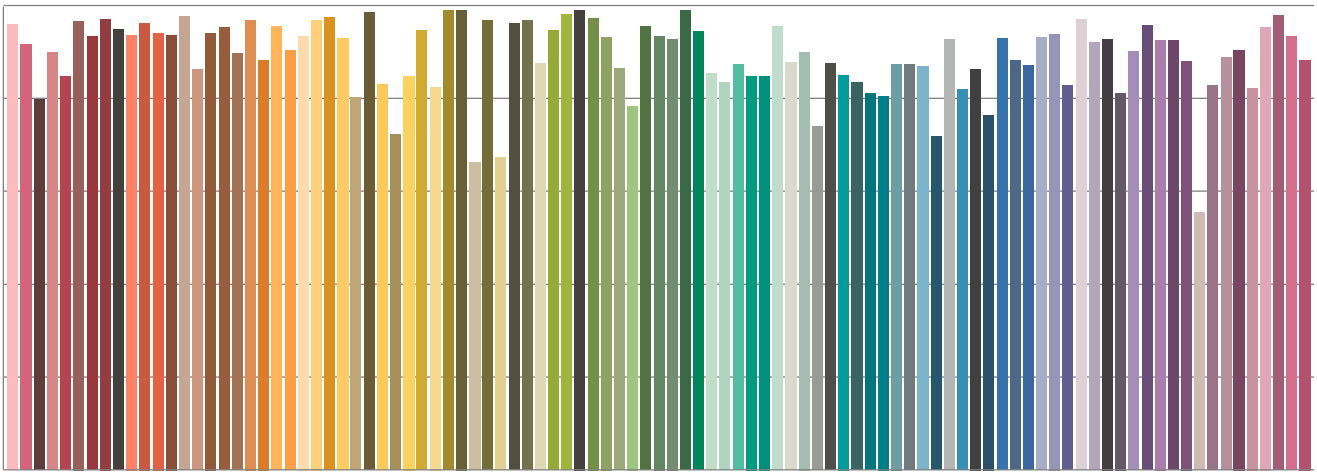
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



Measurement Date: 9/26/2023

Measurements

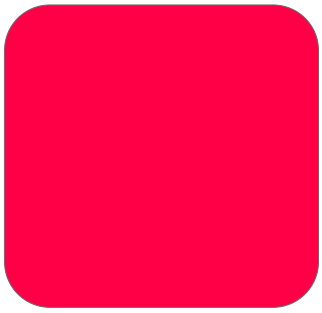
Total Lumen Output: 6496 lm

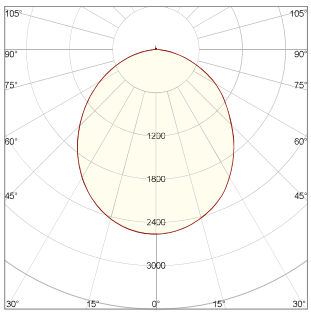
Peak Intensity: 2559 cd

Efficacy: 31 Lumen/Watt

Power: 207 W

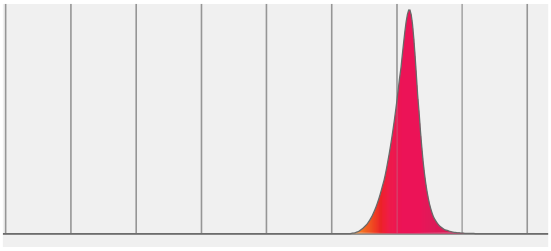
Voltage: 119 V, Current: - A

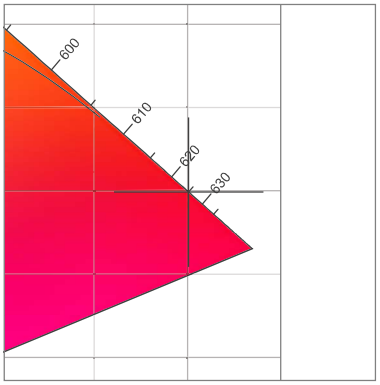




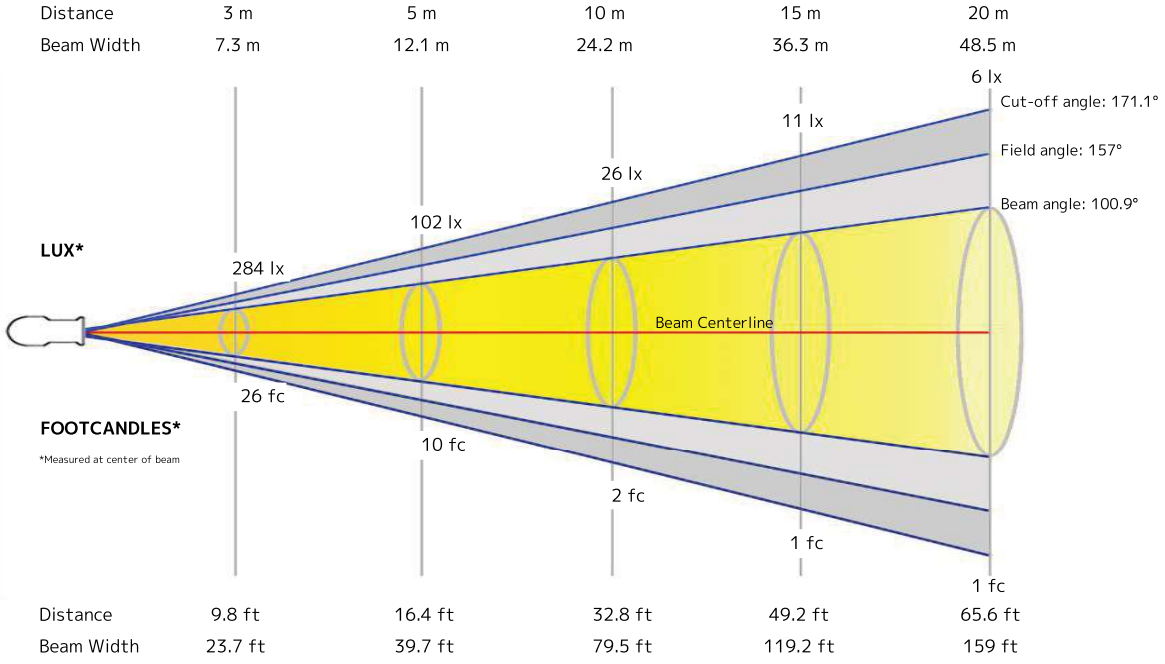
Spectral Power Distribution

Dominant Wavelength 625 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
625	0.701	0.299	0.540	0.346



Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
LX	2559	640	284	160	102	71	52	40	32	26	21	18	15	13	11	10	9	8	7	6
FC	237.8	59.4	26.4	14.9	9.5	6.6	4.9	3.7	2.9	2.4	2	1.7	1.4	1.2	1.1	0.9	0.8	0.7	0.7	0.6

Measurement Date: 9/25/2023

KL Panel XL IP (Green)

Measurements

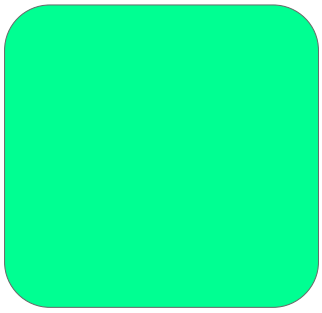
Total Lumen Output: 12317 lm

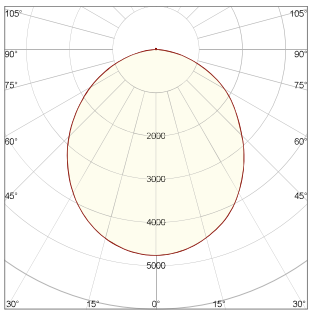
Peak Intensity: 4754 cd

Efficacy: 49 Lumen/Watt

Power: 250 W

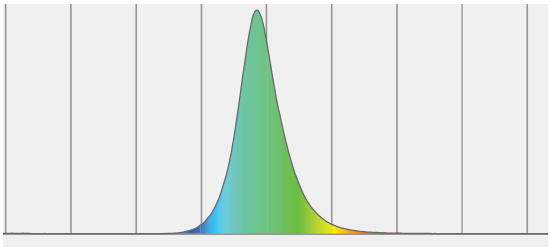
Voltage: 120 V, Current: - A

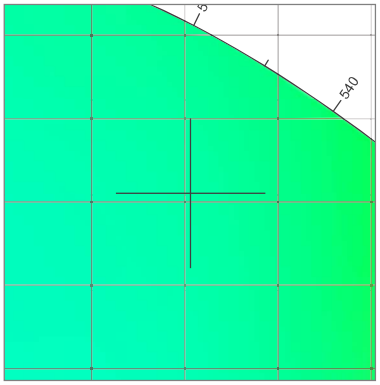




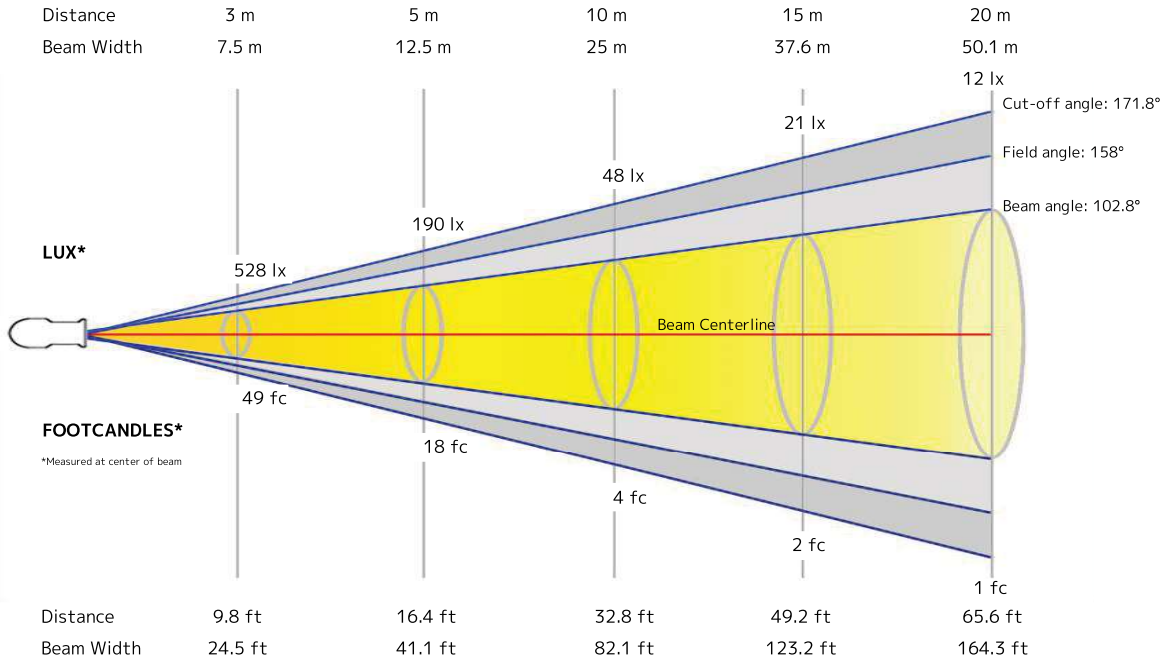
Spectral Power Distribution

Dominant Wavelength 523 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
523	0.153	0.705	0.055	0.379



Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
LX	4754	1188	528	297	190	132	97	74	59	48	39	33	28	24	21	19	16	15	13	12
FC	441.6	110.4	49.1	27.6	17.7	12.3	9	6.9	5.5	4.4	3.6	3.1	2.6	2.3	2	1.7	1.5	1.4	1.2	1.1

Measurement Date: 9/25/2023

Measurements

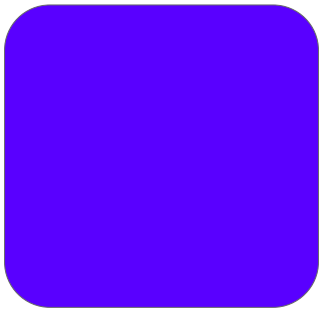
Total Lumen Output: 3098 lm

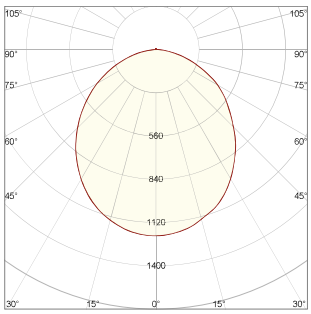
Peak Intensity: 1205 cd

Efficacy: 13 Lumen/Watt

Power: 237 W

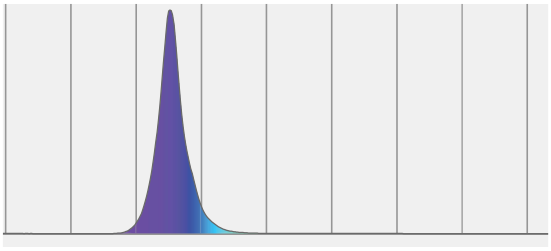
Voltage: 119 V, Current: - A

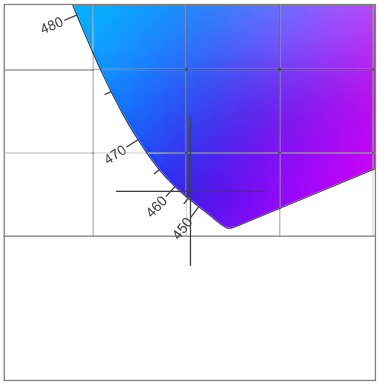




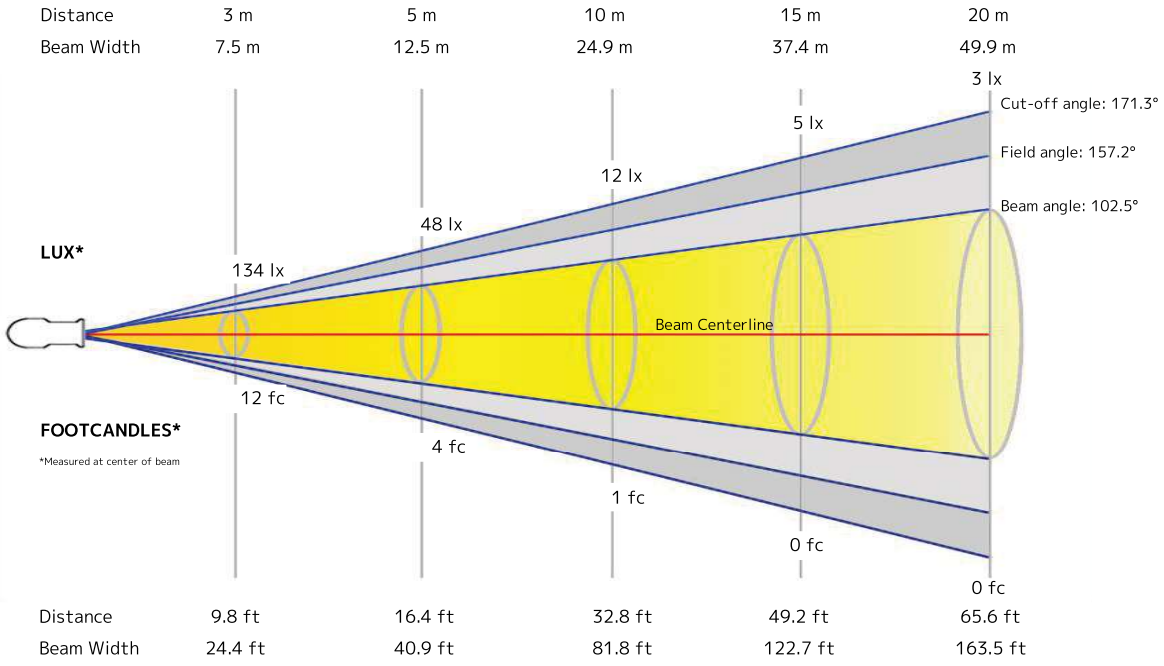
Spectral Power Distribution

Dominant Wavelength 456 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
456	0.152	0.027	0.202	0.054



Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
LX	1205	301	134	75	48	33	25	19	15	12	10	8	7	6	5	5	4	4	3	3
FC	111.9	28	12.4	7	4.5	3.1	2.3	1.7	1.4	1.1	0.9	0.8	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.3

Measurement Date: 9/25/2023

Measurements

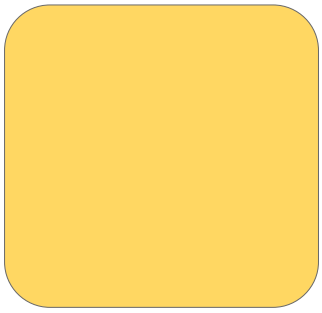
Total Lumen Output: 20525 lm

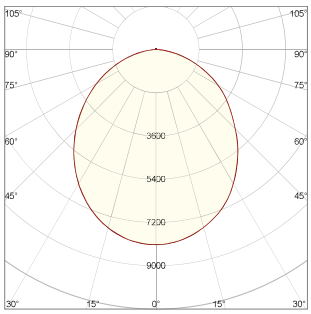
Peak Intensity: 8113 cd

Efficacy: n/a Lumen/Watt

Power: 0.00 W

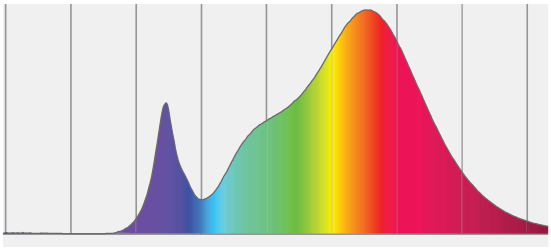
Voltage: 119 V, Current: 0.000 A

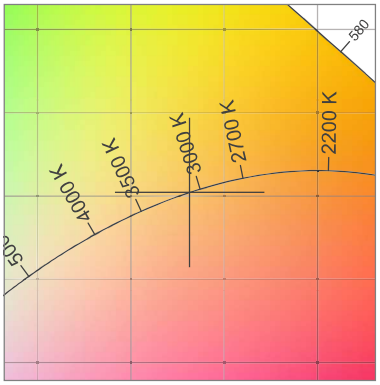




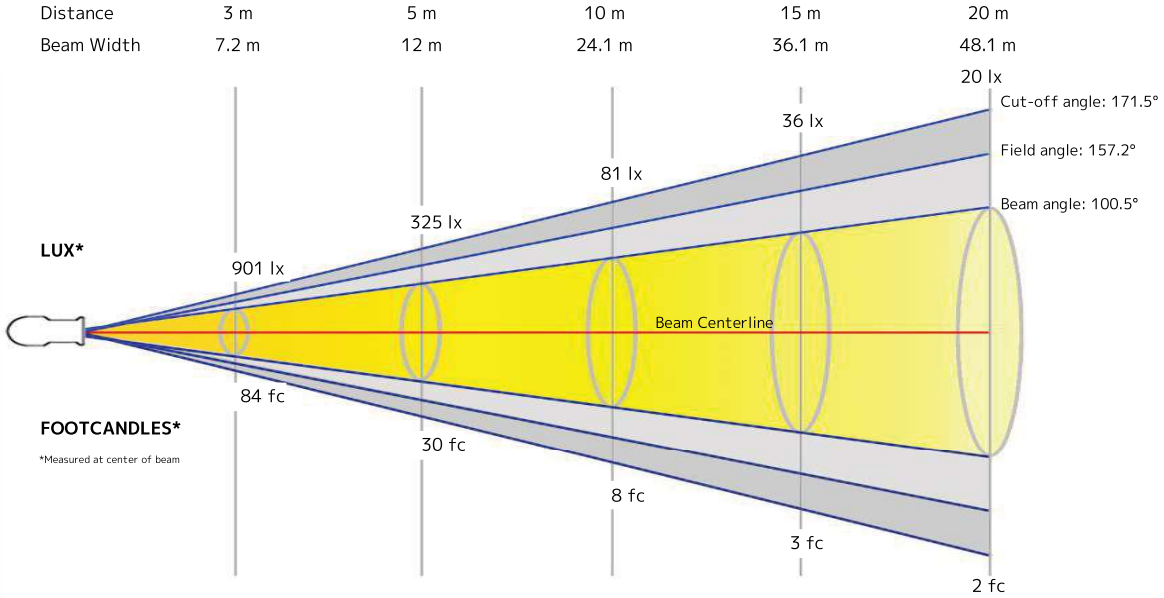
Spectral Power Distribution

Dominant Wavelength 583 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
583	0.431	0.402	0.248	0.347



Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
LX	8113	2028	901	507	325	225	166	127	100	81	67	56	48	41	36	32	28	25	22	20
FC	753.7	188.4	83.7	47.1	30.1	20.9	15.4	11.8	9.3	7.5	6.2	5.2	4.5	3.8	3.3	2.9	2.6	2.3	2.1	1.9

Measurement Date: 9/25/2023

Measurements

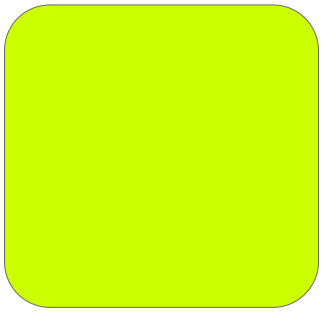
Total Lumen Output: 26316 lm

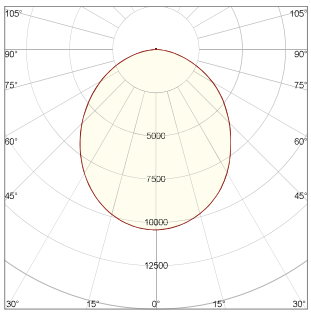
Peak Intensity: 10410 cd

Efficacy: 111 Lumen/Watt

Power: 238 W

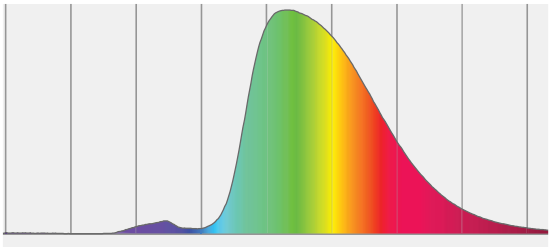
Voltage: 118 V, Current: - A

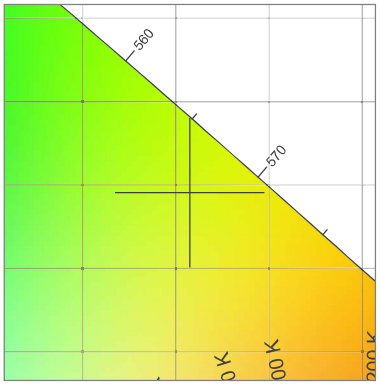




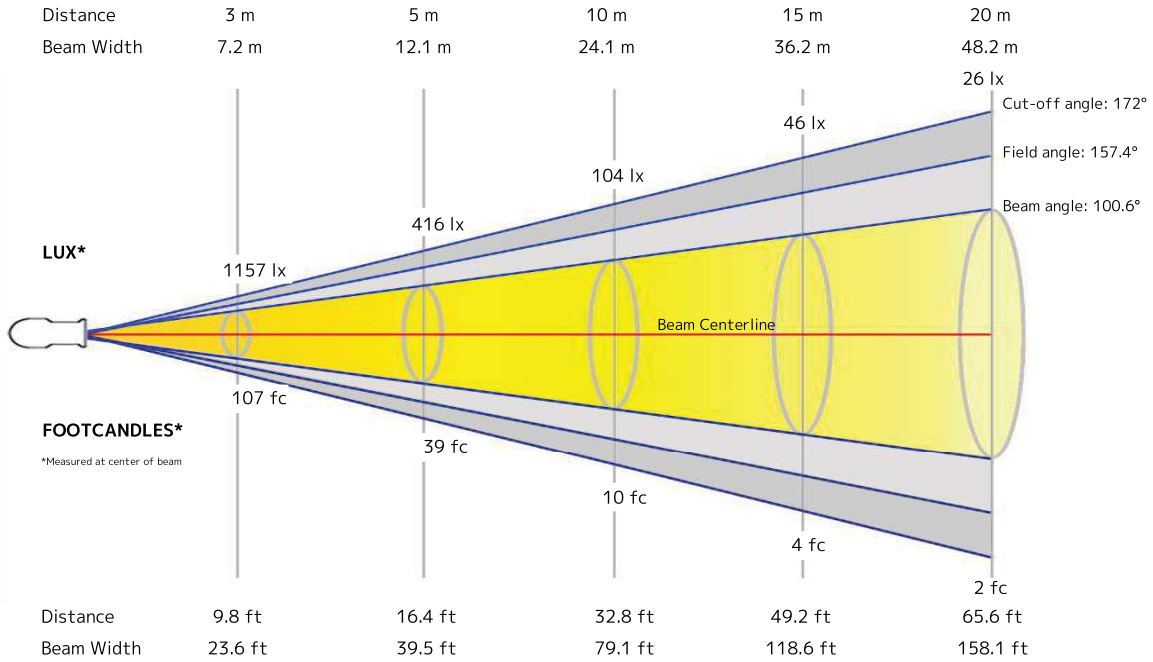
Spectral Power Distribution

Dominant Wavelength 567 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
567	0.407	0.545	0.187	0.375



Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
LX	10410	2603	1157	651	416	289	212	163	129	104	86	72	62	53	46	41	36	32	29	26
FC	967.2	241.8	107.5	60.4	38.7	26.9	19.7	15.1	11.9	9.7	8	6.7	5.7	4.9	4.3	3.8	3.3	3	2.7	2.4

Measurement Date: 9/25/2023

Measurements

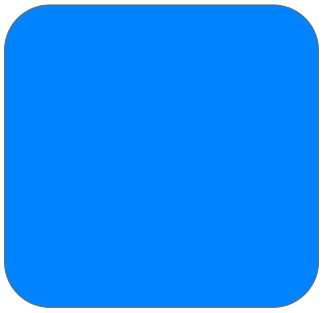
Total Lumen Output: 5401 lm

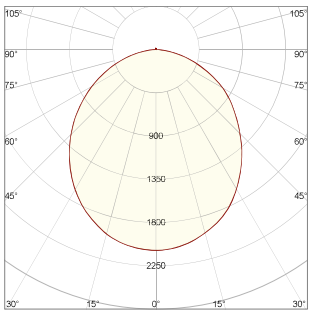
Peak Intensity: 2089 cd

Efficacy: 23 Lumen/Watt

Power: 239 W

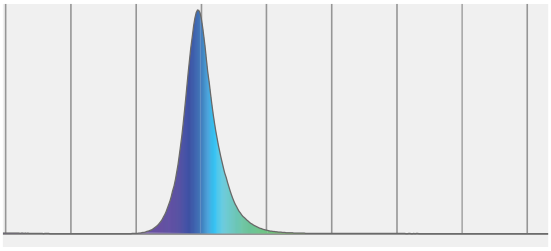
Voltage: 118 V, Current: - A

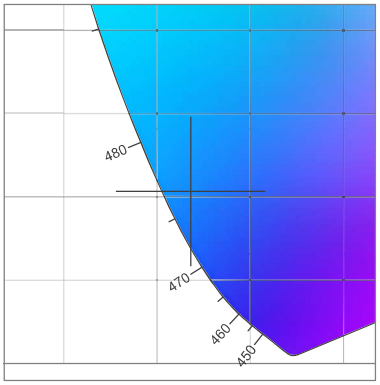




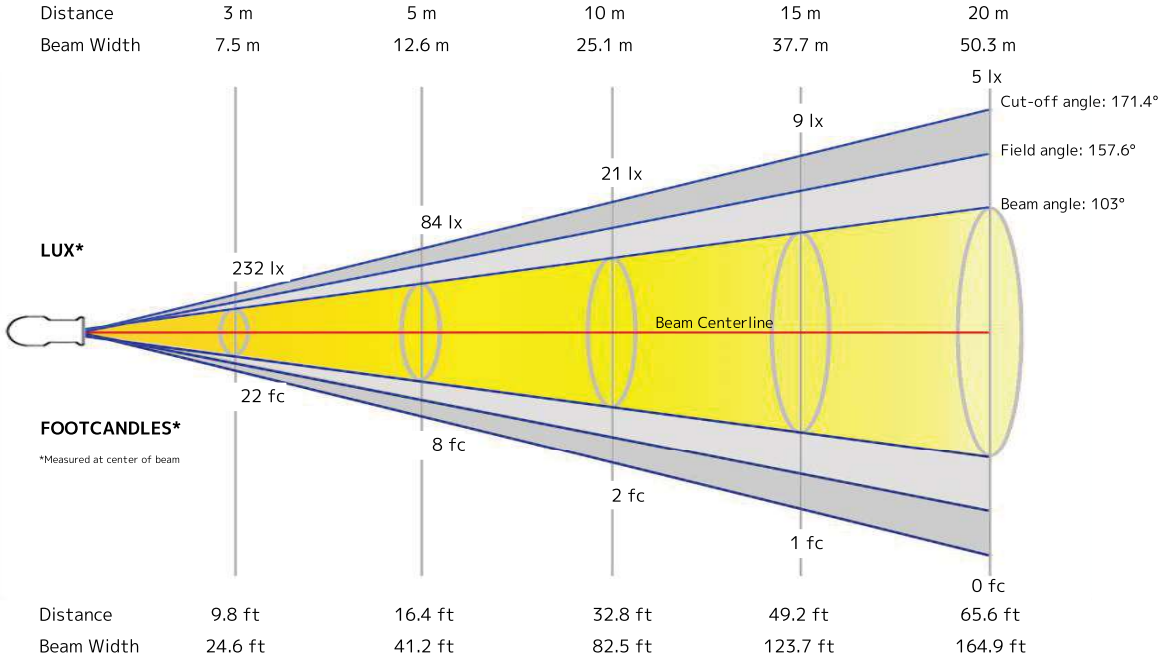
Spectral Power Distribution

Dominant Wavelength 476 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
476	0.118	0.103	0.118	0.155



Beam Intensities from 1-20m

M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FT	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
LX	2089	522	232	131	84	58	43	33	26	21	17	15	12	11	9	8	7	6	6	5
FC	194.1	48.5	21.6	12.1	7.8	5.4	4	3	2.4	1.9	1.6	1.3	1.1	1	0.9	0.8	0.7	0.6	0.5	0.5

Measurement Date: 9/25/2023