SIX+ BAR S

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: 4339 lm

Peak Intensity: 34217 cd

Beam

Beam Angle (50%): 18.6°

Field Angle (10%): 33.3°

Cutoff Angle (2.5%): 47.3°

Color

Color Temperature: 6623 K

CRI: 67.5

TLCI: 75

TM30 R_F: 78.4

TM30 R_g: 120.6

Power Details

Efficacy: 48 Lumen/Watt

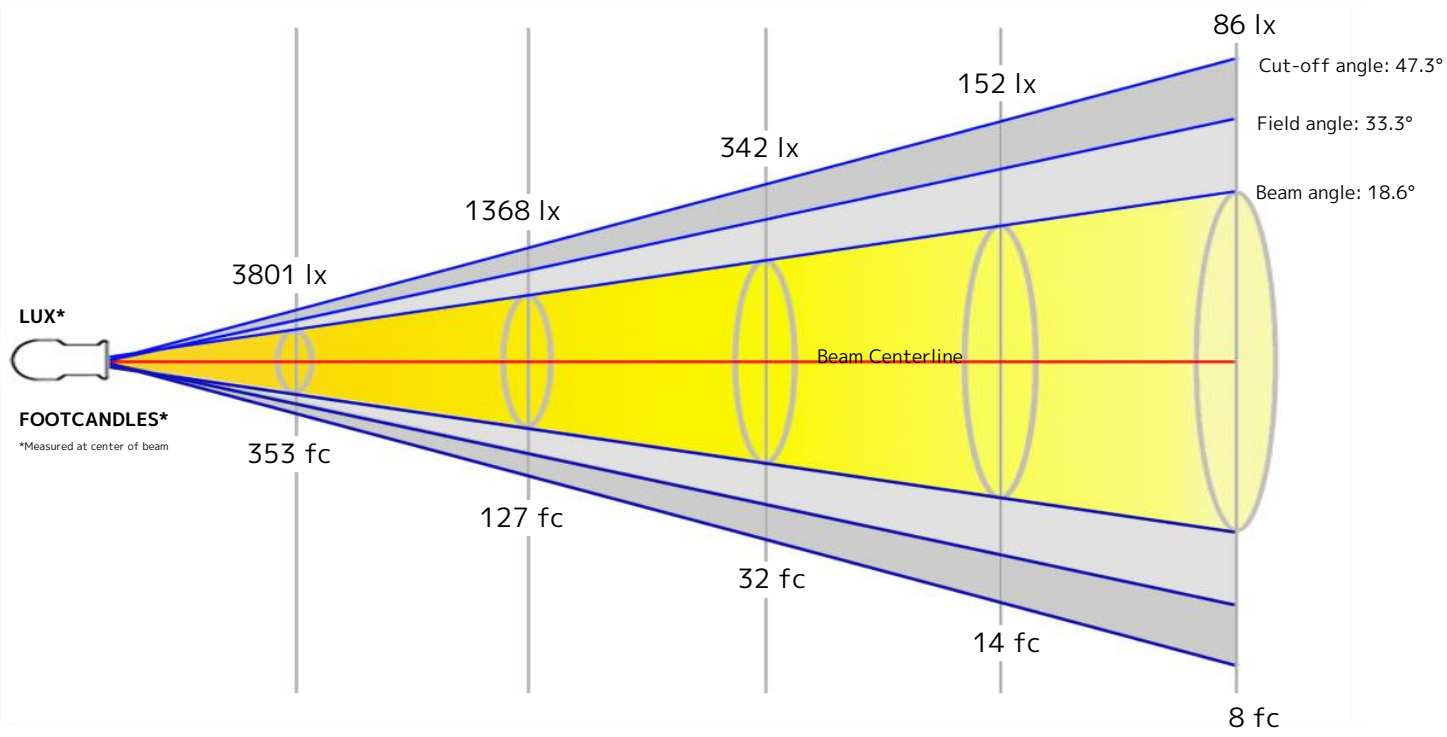
Power: 90.0 W

Supply Voltage: 120 V

Current: 0.755 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1m	1.6 m	3.3 m	4.9 m	6.5 m



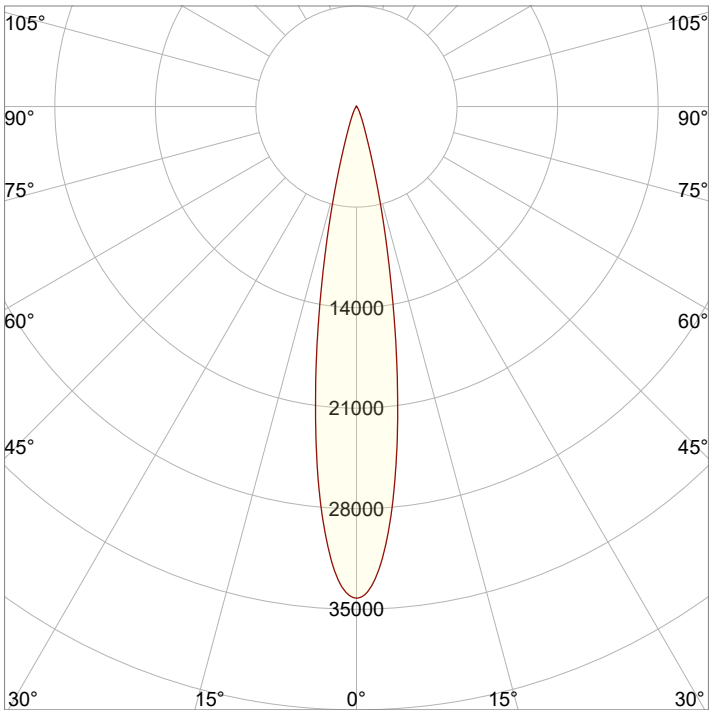
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.2 ft	5.4 ft	10.7 ft	16.1 ft	21.4 ft

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	34208	8552	3801	2138	1368	950	698	534	422	342	283	238	202	175	152	134	118	106	95	86
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	3178	794.5	353.1	198.6	127.1	88.3	64.9	49.7	39.2	31.8	26.3	22.1	18.8	16.2	14.1	12.4	11	9.8	8.8	7.9

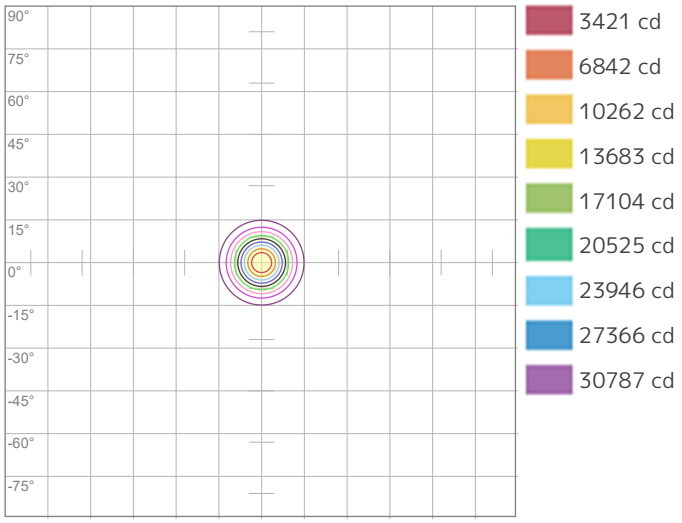
Measurement Date: 8/14/2024

Angular Distribution



Beam Angle - 50%
18.6°
Field Angle - 10%
33.3°
Cutoff Angle - 2.5%
47.3°

ISO Diagrams

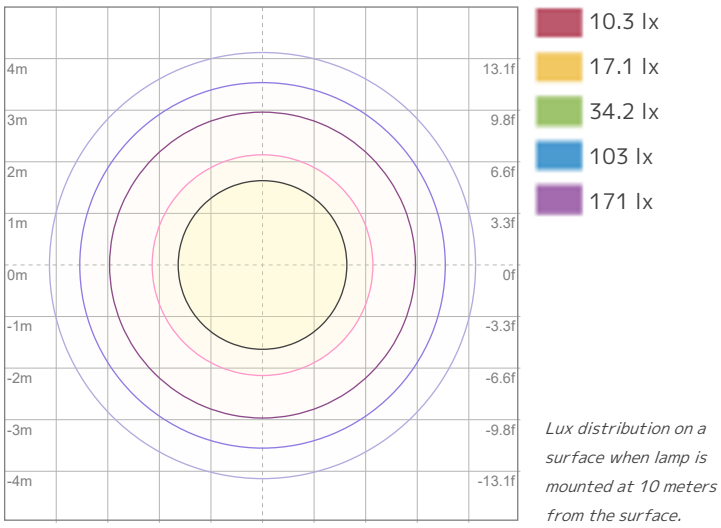


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 34208 cd



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

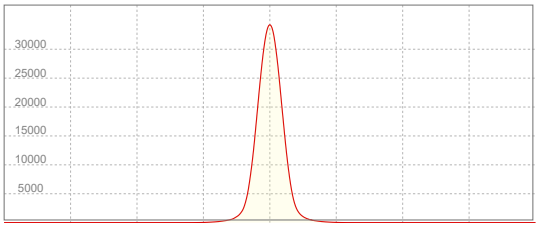
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 342 lx

Linear Distribution



Peak Candela

34217 cd

Calculate Center Beam Intensities

lux = 34217 / distance(m)^2

fc = 34217 / distance(ft)^2

Measurement Date: 8/14/2024

Six+ Bar S (Full Output)

Key Measurements

Output

Total Lumen Output: 4435 lm

Peak Intensity: 34976 cd

Beam

Beam Angle (50%): 18.6°

Field Angle (10%): 33.3°

Cutoff Angle (2.5%): 47.3°

Color

Color Temperature: 6769 K

CRI: 65.3

TLCI: 71

TM30 R_F: 76.8

TM30 R_g: 122.2

Power Details

Efficacy: 42 Lumen/Watt

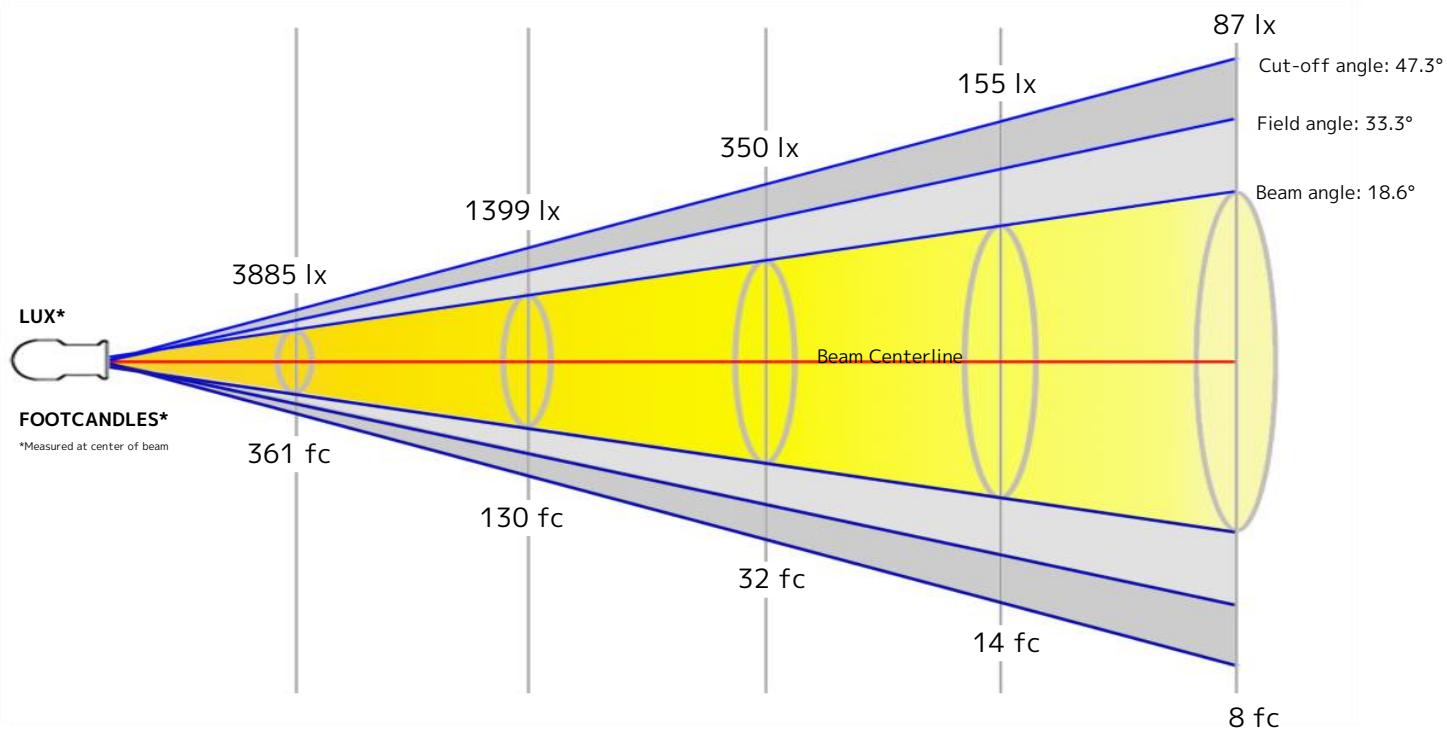
Power: 104.5 W

Supply Voltage: 120 V

Current: 0.877 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1m	1.6 m	3.3 m	4.9 m	6.5 m



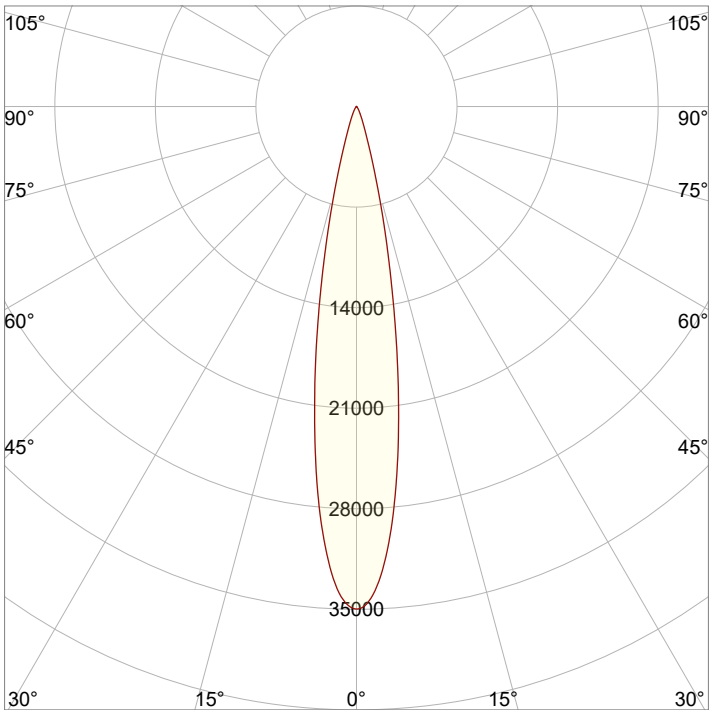
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.2 ft	5.4 ft	10.7 ft	16.1 ft	21.5 ft

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	34967	8742	3885	2185	1399	971	714	546	432	350	289	243	207	178	155	137	121	108	97	87
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	3248.5	812.1	360.9	203	129.9	90.2	66.3	50.8	40.1	32.5	26.8	22.6	19.2	16.6	14.4	12.7	11.2	10	9	8.1

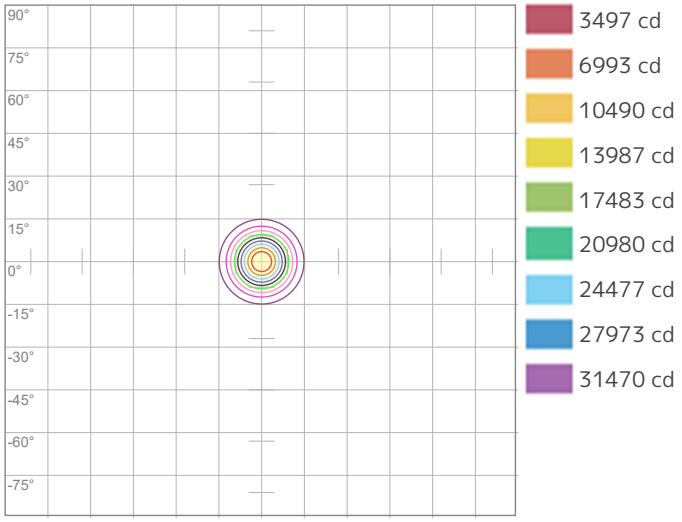
Measurement Date: 8/14/2024

Angular Distribution



Beam Angle - 50%
18.6°
Field Angle - 10%
33.3°
Cutoff Angle - 2.5%
47.3°

ISO Diagrams

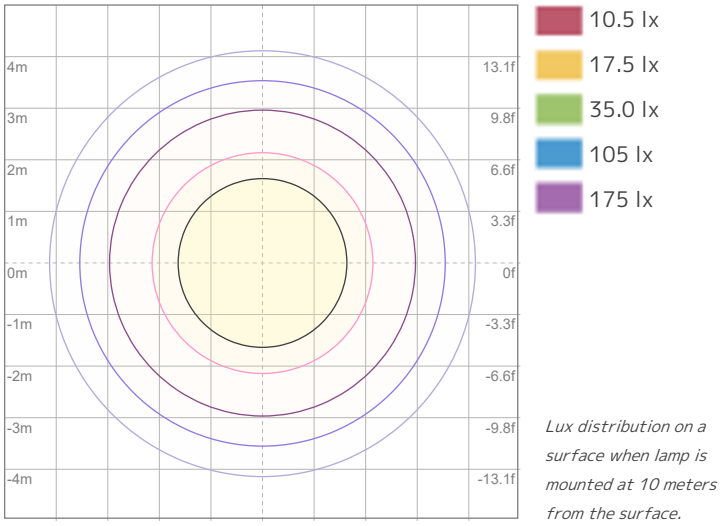


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 34967 cd



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

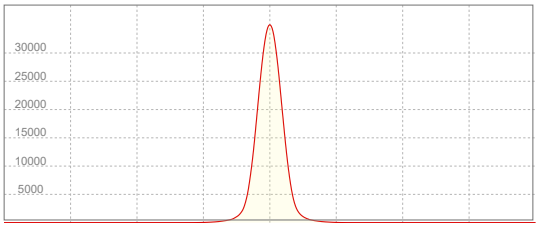
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 350 lx

Linear Distribution



Peak Candela

34976 cd

Calculate Center Beam Intensities

lux = 34976 / distance(m)^2

fc = 34976 / distance(ft)^2

Measurement Date: 8/14/2024

Key Measurements

Output

Total Lumen Output: 3390 lm

Peak Intensity: 26957 cd

Beam

Beam Angle (50%): 18.6°

Field Angle (10%): 33.1°

Cutoff Angle (2.5%): 46.8°

Color

Color Temperature: 2679 K

CRI: 88.2

TLCI: 75

TM30 R_F: 89.8

TM30 R_g: 107.4

Power Details

Efficacy: 53 Lumen/Watt

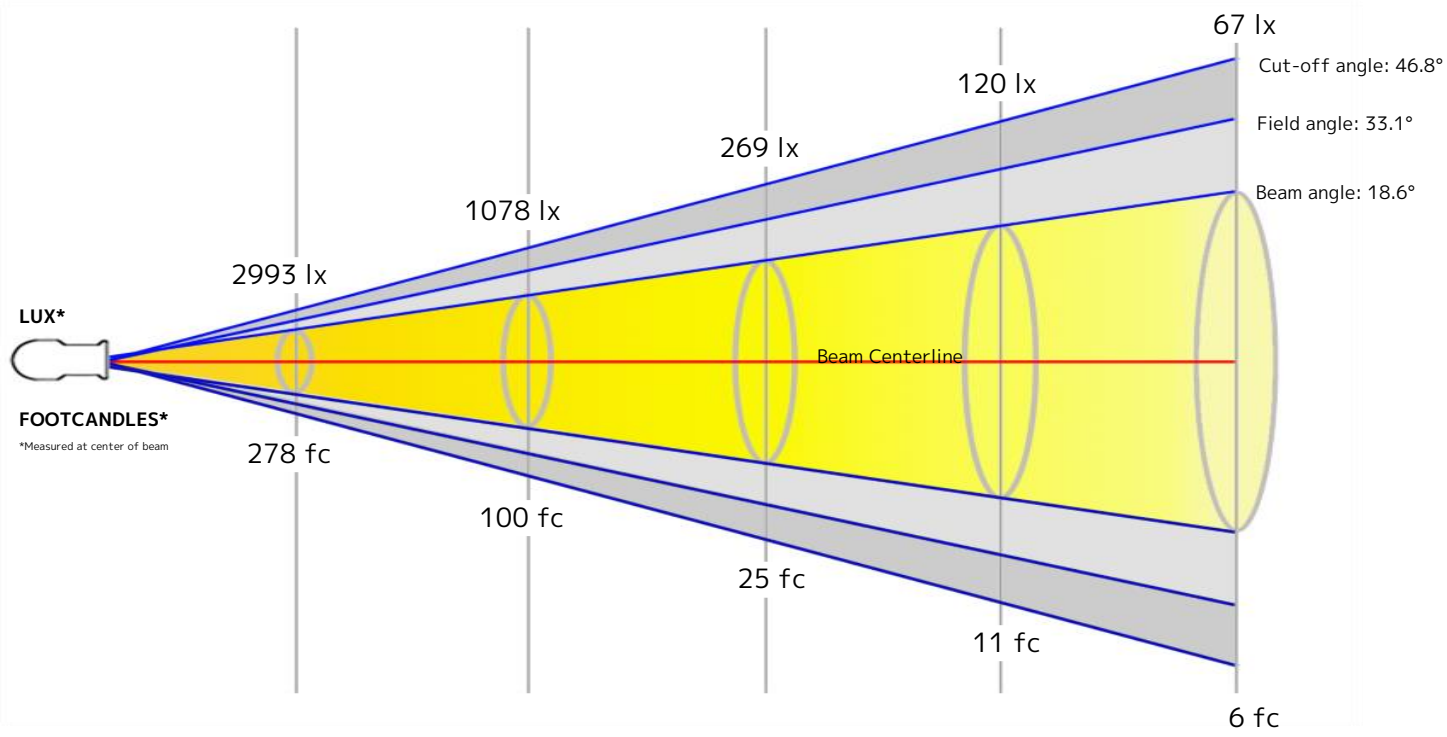
Power: 64.4 W

Supply Voltage: 120 V

Current: 0.549 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1m	1.6 m	3.3 m	4.9 m	6.5 m



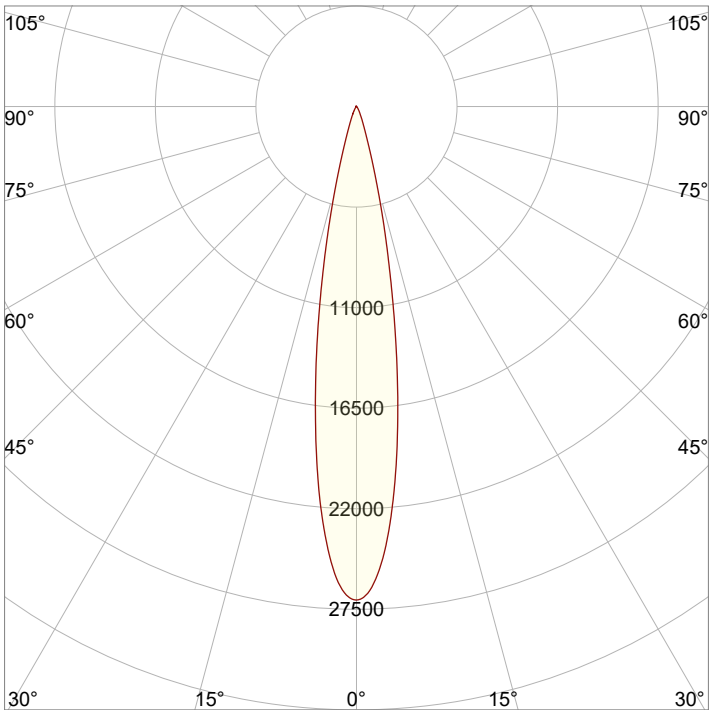
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.2 ft	5.4 ft	10.7 ft	16.1 ft	21.4 ft

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	26940	6735	2993	1684	1078	748	550	421	333	269	223	187	159	137	120	105	93	83	75	67
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	2502.9	625.7	278.1	156.4	100.1	69.5	51.1	39.1	30.9	25	20.7	17.4	14.8	12.8	11.1	9.8	8.7	7.7	6.9	6.3

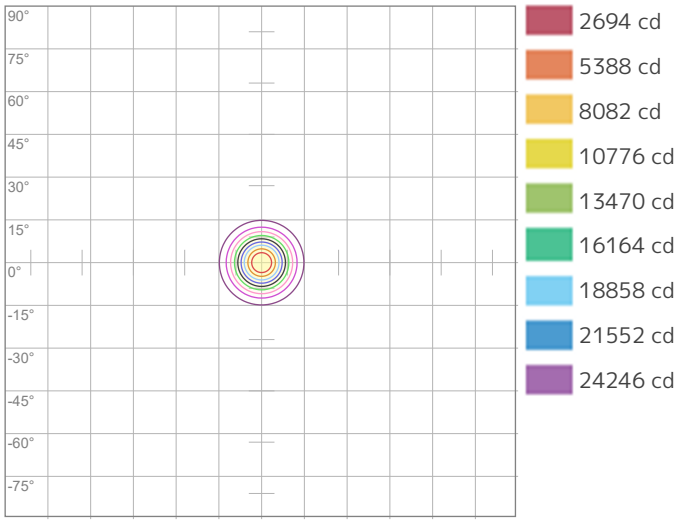
Measurement Date: 8/14/2024

Angular Distribution



Beam Angle - 50%
18.6°
Field Angle - 10%
33.1°
Cutoff Angle - 2.5%
46.8°

ISO Diagrams

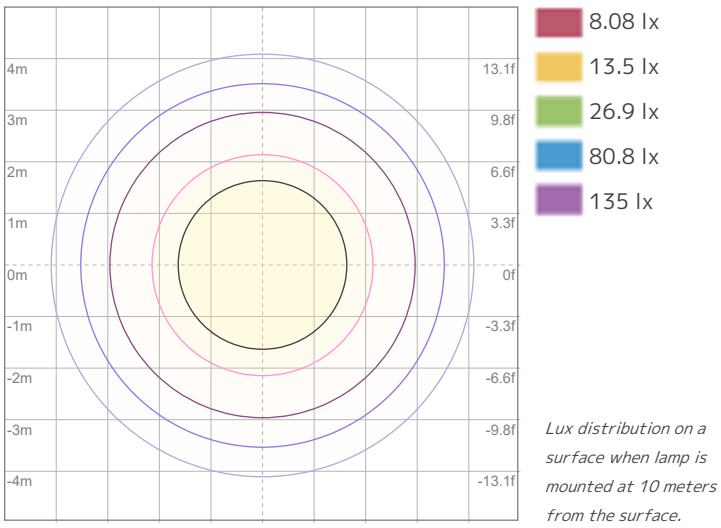


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 26940 cd



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

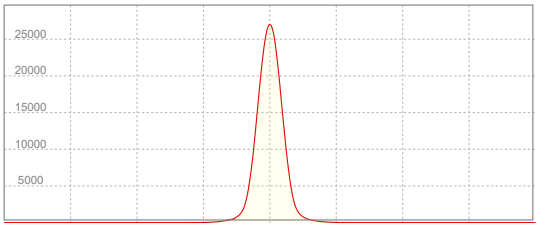
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 269 lx

Linear Distribution



Peak Candela

26957 cd

Calculate Center Beam Intensities

lux = 26957 / distance(m)^2

fc = 26957 / distance(ft)^2

Measurement Date: 8/14/2024

Key Measurements

Output

Total Lumen Output: 3387 lm

Peak Intensity: 27265 cd

Beam

Beam Angle (50%): 18.5°

Field Angle (10%): 33°

Cutoff Angle (2.5%): 46.3°

Color

Color Temperature: 3254 K

CRI: 90.1

TLCI: 78

TM30 R_F: 91.1

TM30 R_g: 107.4

Power Details

Efficacy: 52 Lumen/Watt

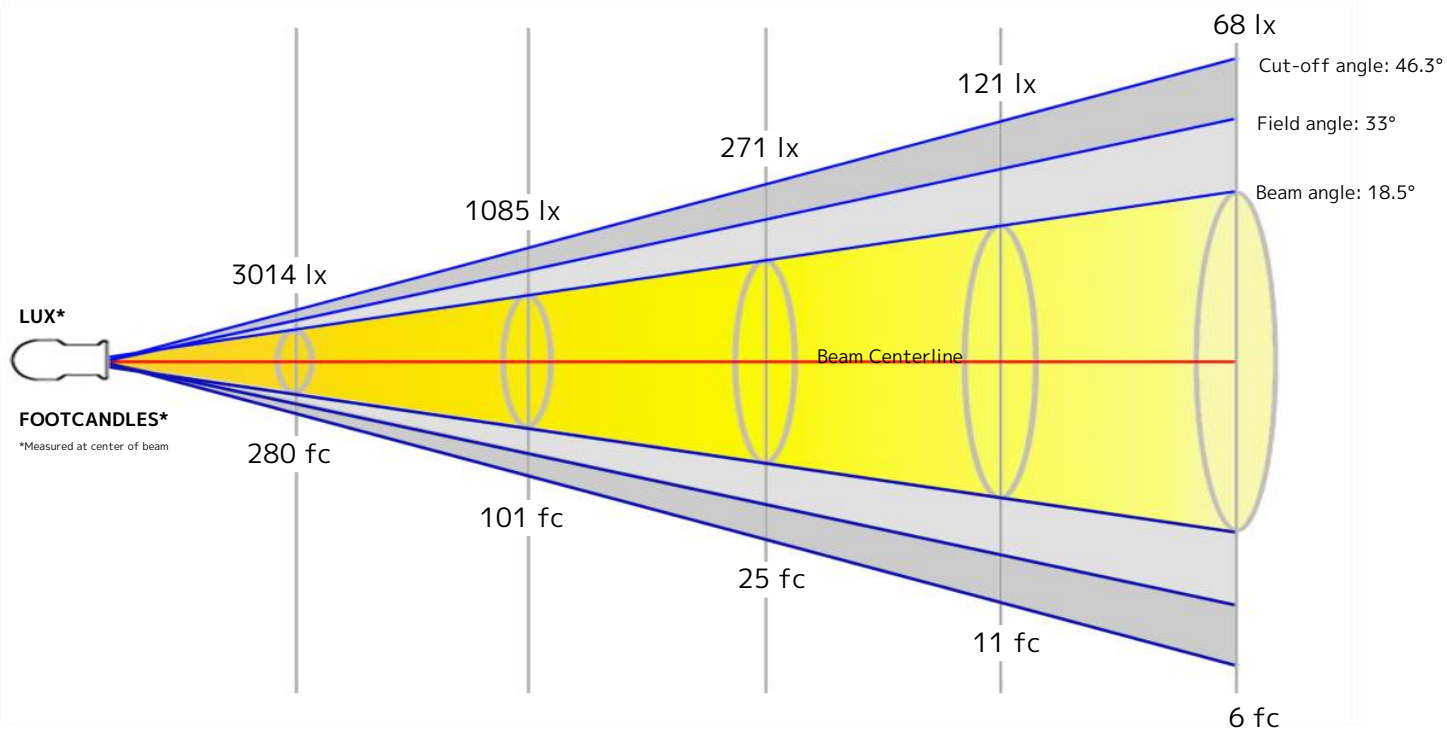
Power: 65.2 W

Supply Voltage: 120 V

Current: 0.553 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1m	1.6 m	3.3 m	4.9 m	6.5 m



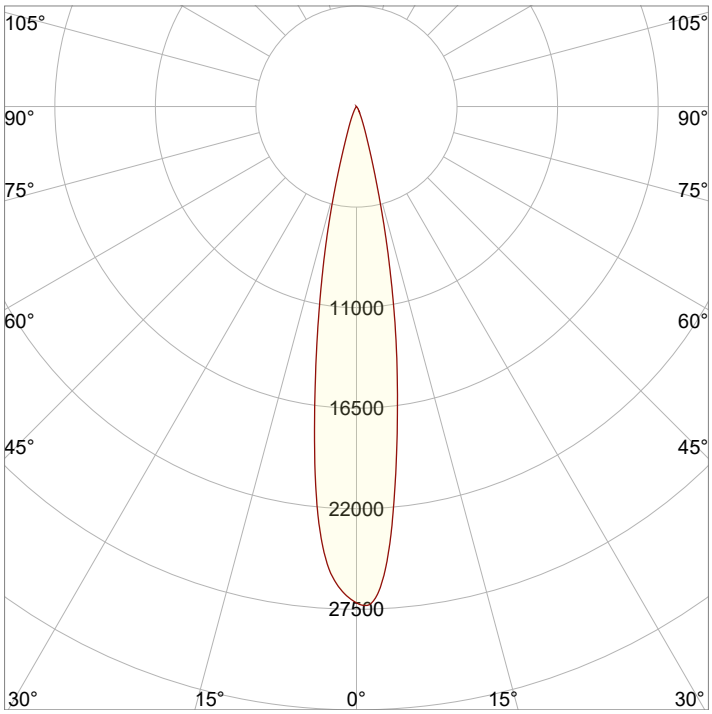
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.2 ft	5.3 ft	10.7 ft	16 ft	21.4 ft

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	27124	6781	3014	1695	1085	753	554	424	335	271	224	188	160	138	121	106	94	84	75	68
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	2519.9	630	280	157.5	100.8	70	51.4	39.4	31.1	25.2	20.8	17.5	14.9	12.9	11.2	9.8	8.7	7.8	7	6.3

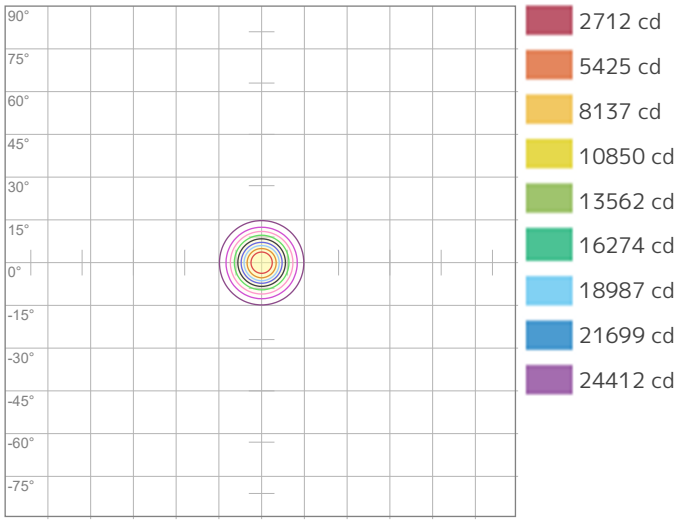
Measurement Date: 8/14/2024

Angular Distribution



Beam Angle - 50%
18.5°
Field Angle - 10%
33°
Cutoff Angle - 2.5%
46.3°

ISO Diagrams

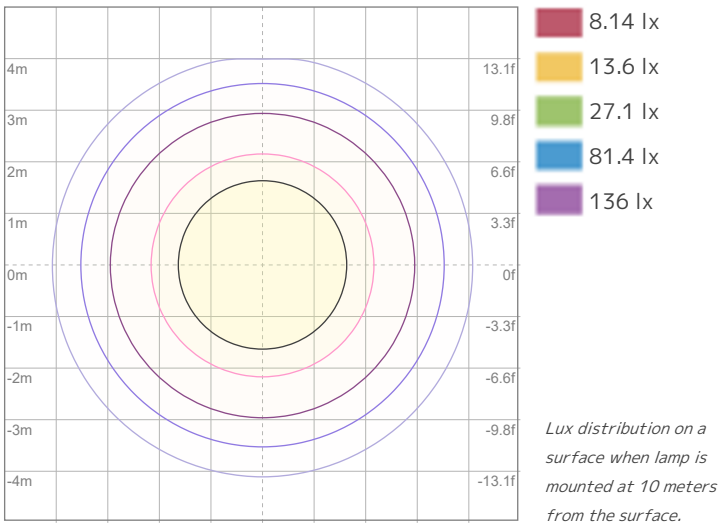


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 27124 cd



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

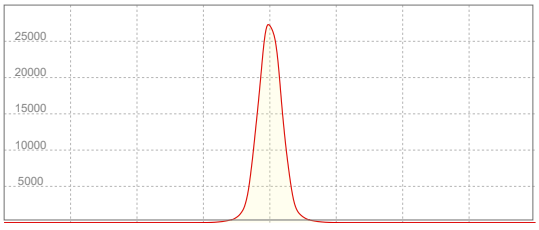
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 271 lx

Linear Distribution



Peak Candela

27265 cd

Calculate Center Beam Intensities

lux = 27265 / distance(m)^2

fc = 27265 / distance(ft)^2

Measurement Date: 8/14/2024

Key Measurements

Output

Total Lumen Output: 3637 lm

Peak Intensity: 28922 cd

Beam

Beam Angle (50%): 18.6°

Field Angle (10%): 33.3°

Cutoff Angle (2.5%): 47°

Color

Color Temperature: 4493 K

CRI: 90.9

TLCI: 80

TM30 R_F: 90.5

TM30 R_g: 107.3

Power Details

Efficacy: 53 Lumen/Watt

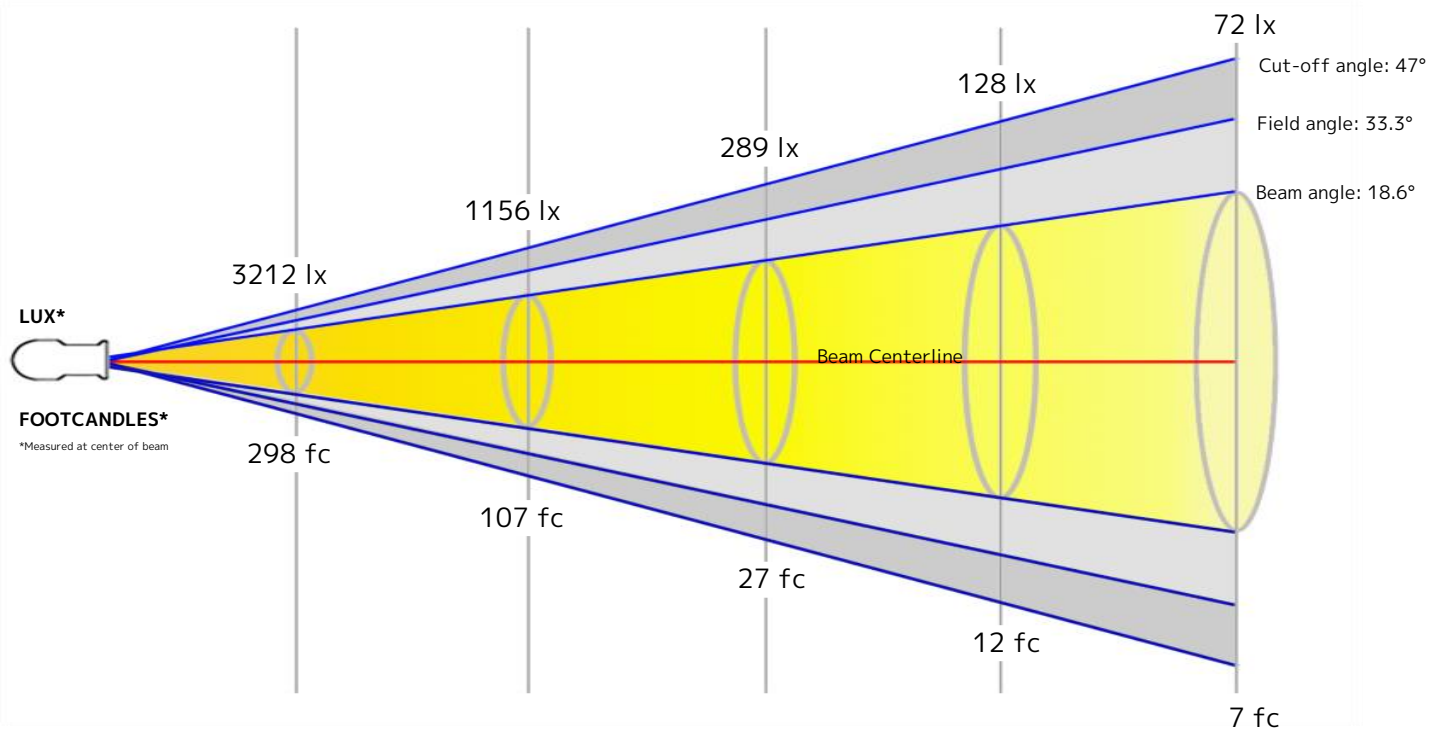
Power: 68.8 W

Supply Voltage: 120 V

Current: 0.581 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1m	1.6 m	3.3 m	4.9 m	6.5 m



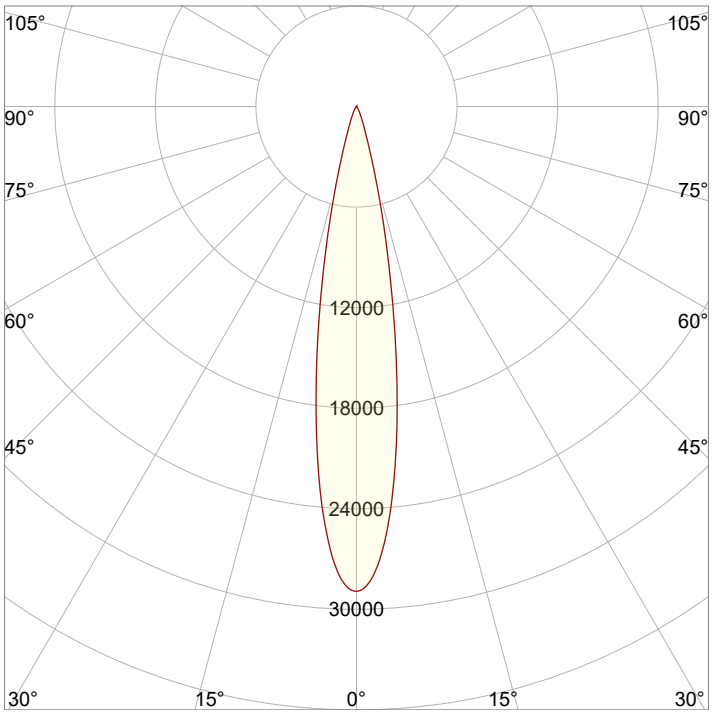
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.2 ft	5.4 ft	10.7 ft	16.1 ft	21.4 ft

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	28905	7226	3212	1807	1156	803	590	452	357	289	239	201	171	147	128	113	100	89	80	72
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	2685.3	671.3	298.4	167.8	107.4	74.6	54.8	42	33.2	26.9	22.2	18.6	15.9	13.7	11.9	10.5	9.3	8.3	7.4	6.7

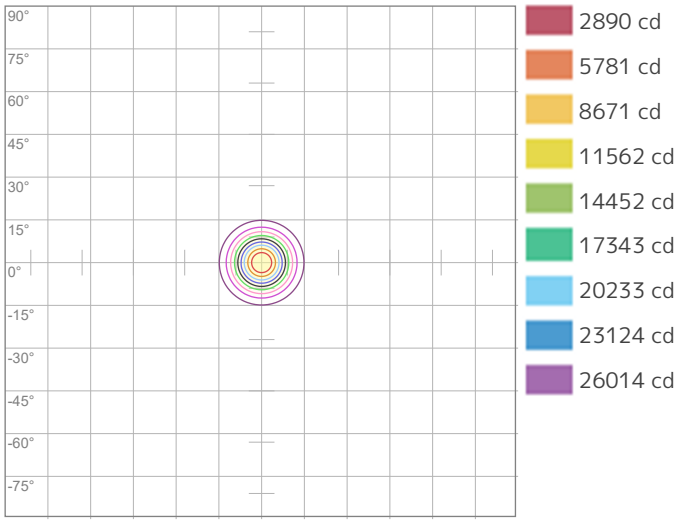
Measurement Date: 8/14/2024

Angular Distribution



Beam Angle - 50%
18.6°
Field Angle - 10%
33.3°
Cutoff Angle - 2.5%
47°

ISO Diagrams

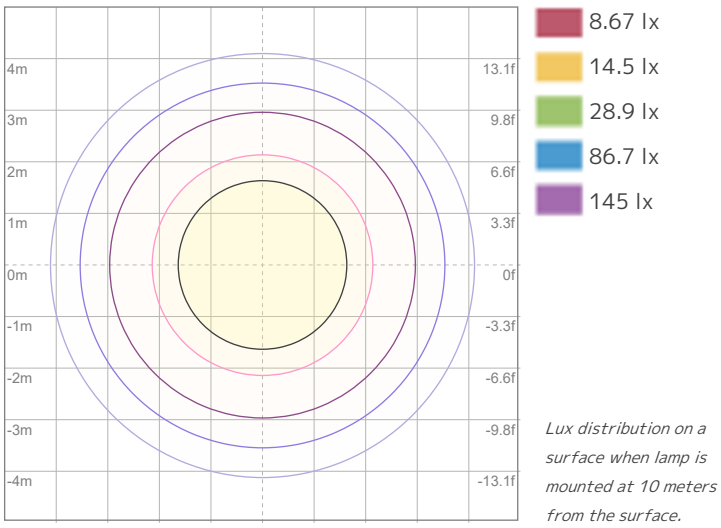


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 28905 cd



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

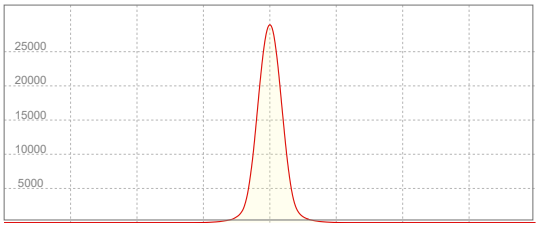
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 289 lx

Linear Distribution



Peak Candela

28922 cd

Calculate Center Beam Intensities

lux = 28922 / distance(m)^2

fc = 28922 / distance(ft)^2

Measurement Date: 8/14/2024

Key Measurements

Output

Total Lumen Output: 3855 lm

Peak Intensity: 30251 cd

Beam

Beam Angle (50%): 18.6°

Field Angle (10%): 33.4°

Cutoff Angle (2.5%): 47.4°

Color

Color Temperature: 5579 K

CRI: 89.7

TLCI: 82

TM30 R_F: 89.2

TM30 R_g: 107.0

Power Details

Efficacy: 53 Lumen/Watt

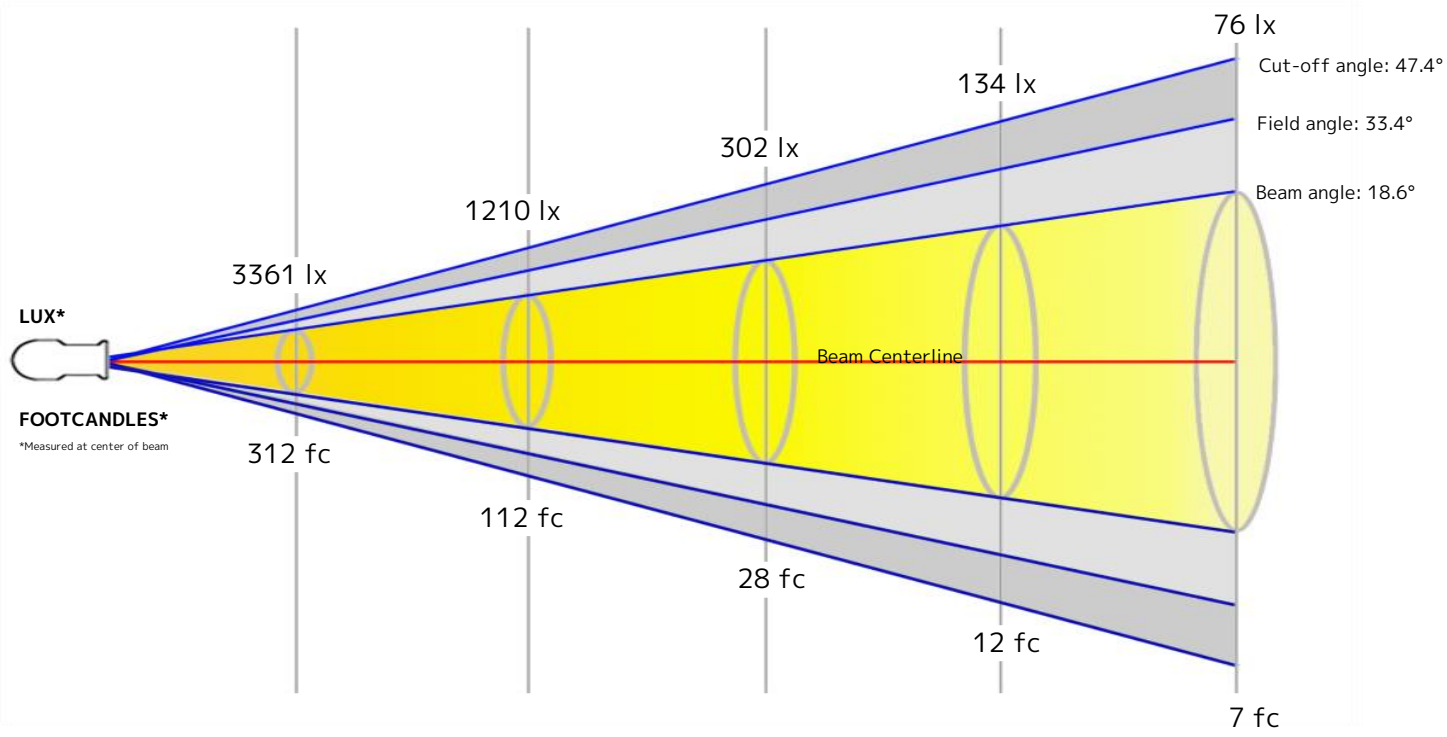
Power: 72.9 W

Supply Voltage: 119 V

Current: 0.623 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1m	1.6 m	3.3 m	4.9 m	6.6 m



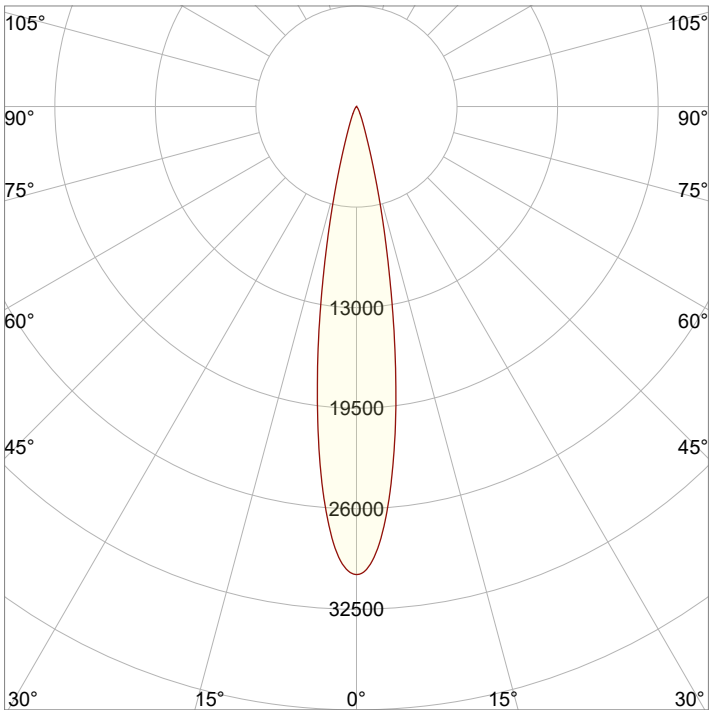
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.2 ft	5.4 ft	10.8 ft	16.1 ft	21.5 ft

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	30249	7562	3361	1891	1210	840	617	473	373	302	250	210	179	154	134	118	105	93	84	76
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	2810.2	702.5	312.2	175.6	112.4	78.1	57.4	43.9	34.7	28.1	23.2	19.5	16.6	14.3	12.5	11	9.7	8.7	7.8	7

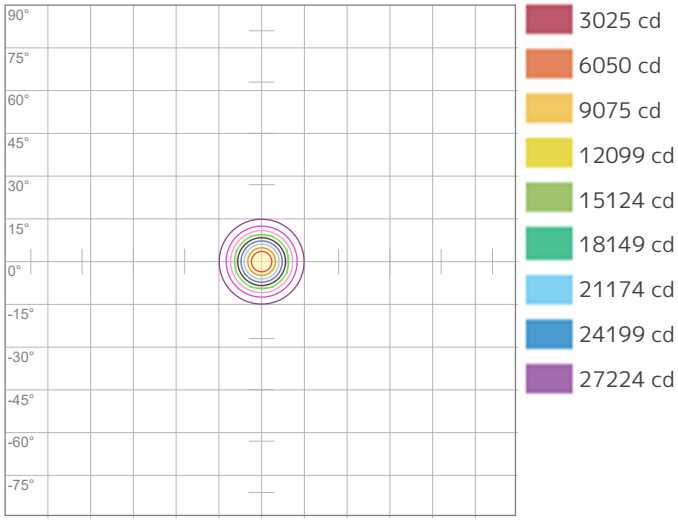
Measurement Date: 8/14/2024

Angular Distribution



Beam Angle - 50%
18.6°
Field Angle - 10%
33.4°
Cutoff Angle - 2.5%
47.4°

ISO Diagrams

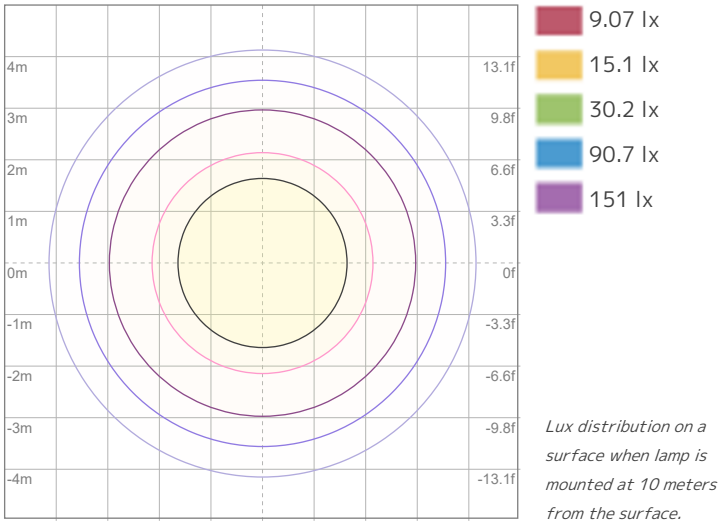


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 30249 cd



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

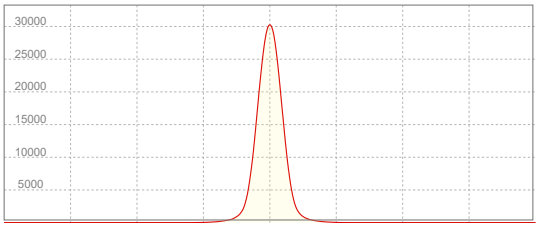
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 302 lx

Linear Distribution



Peak Candela

30251 cd

Calculate Center Beam Intensities

lux = 30251 / distance(m)^2

fc = 30251 / distance(ft)^2

Measurement Date: 8/14/2024

Key Measurements

Output

Total Lumen Output: 3947 lm

Peak Intensity: 30573 cd

Beam

Beam Angle (50%): 18.6°

Field Angle (10%): 33.5°

Cutoff Angle (2.5%): 47.8°

Color

Color Temperature: 5981 K

CRI: 89.5

TLCI: 83

TM30 R_F: 88.9

TM30 R_g: 106.7

Power Details

Efficacy: 53 Lumen/Watt

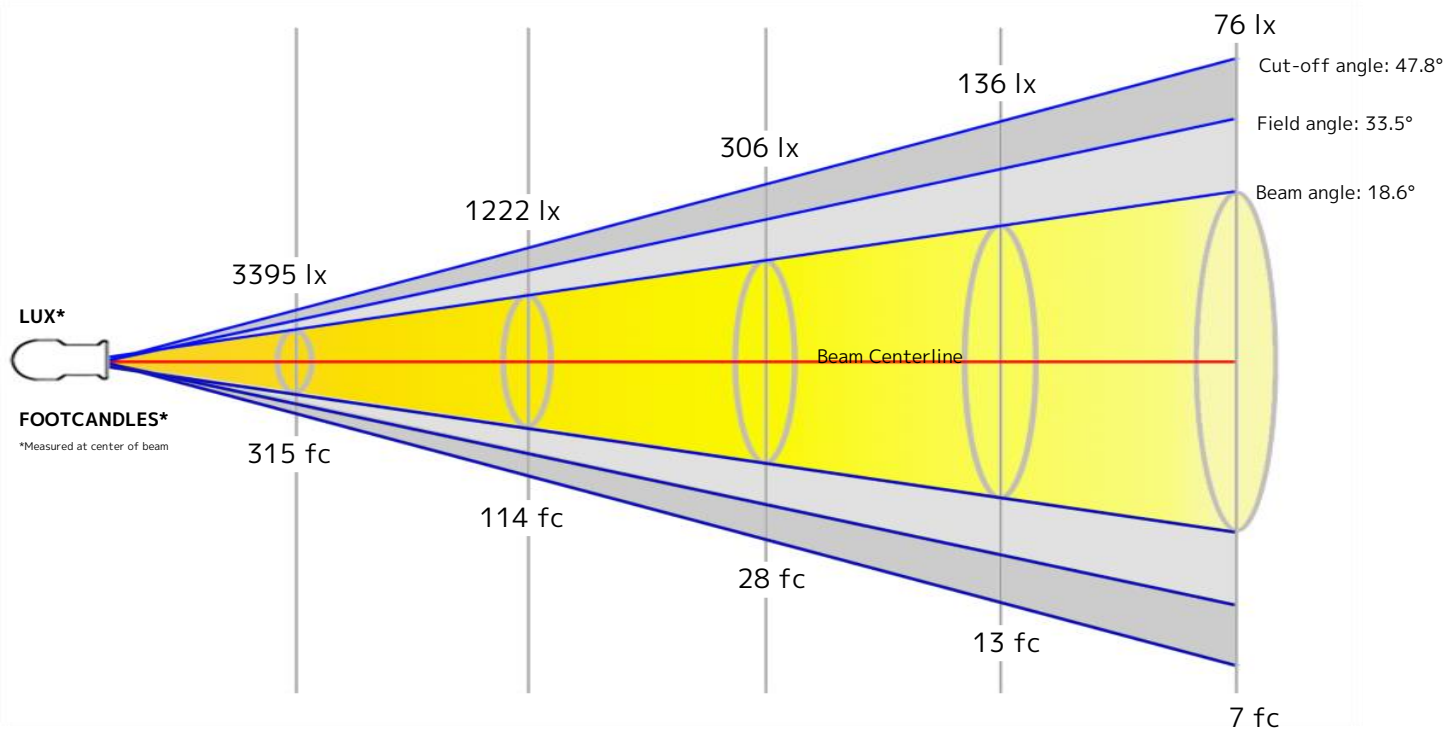
Power: 74.1 W

Supply Voltage: 119 V

Current: 0.628 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1m	1.6 m	3.3 m	4.9 m	6.6 m



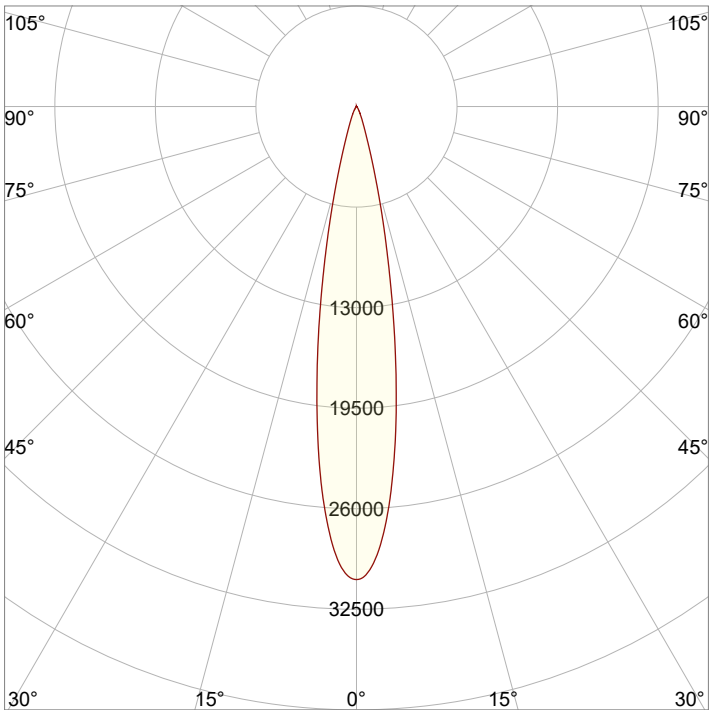
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.2 ft	5.4 ft	10.8 ft	16.1 ft	21.5 ft

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	30553	7638	3395	1910	1222	849	624	477	377	306	253	212	181	156	136	119	106	94	85	76
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	2838.5	709.6	315.4	177.4	113.5	78.8	57.9	44.4	35	28.4	23.5	19.7	16.8	14.5	12.6	11.1	9.8	8.8	7.9	7.1

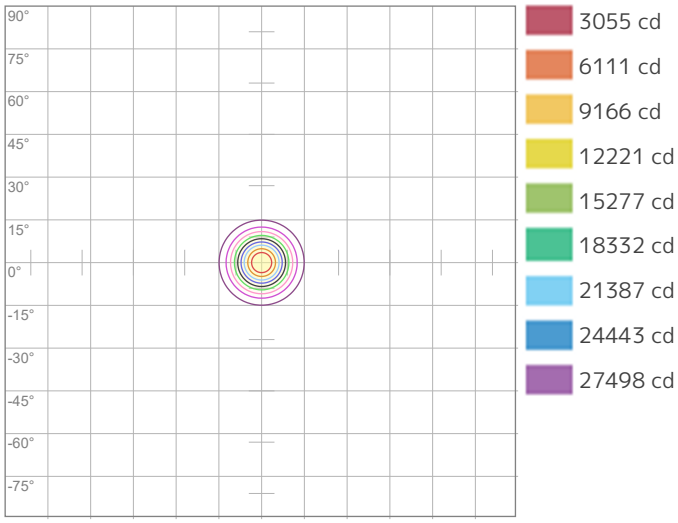
Measurement Date: 8/14/2024

Angular Distribution



Beam Angle - 50%
18.6°
Field Angle - 10%
33.5°
Cutoff Angle - 2.5%
47.8°

ISO Diagrams

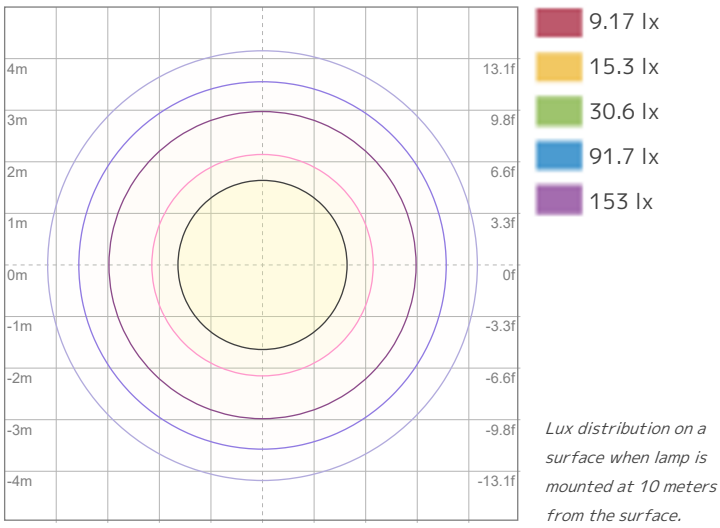


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 30553 cd



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

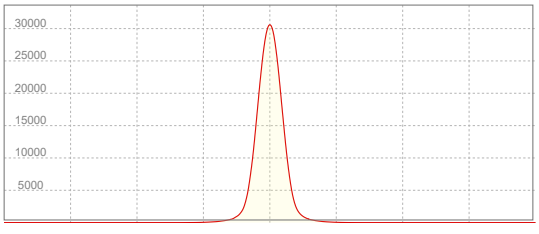
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 306 lx

Linear Distribution



Peak Candela

30573 cd

Calculate Center Beam Intensities

lux = 30573 / distance(m)^2

fc = 30573 / distance(ft)^2

Measurement Date: 8/14/2024

Key Measurements

Output

Total Lumen Output: 3936 lm

Peak Intensity: 30493 cd

Beam

Beam Angle (50%): 18.6°

Field Angle (10%): 33.4°

Cutoff Angle (2.5%): 47.8°

Color

Color Temperature: 6483 K

CRI: 89.3

TLCI: 85

TM30 R_F: 88.5

TM30 R_g: 106.6

Power Details

Efficacy: 52 Lumen/Watt

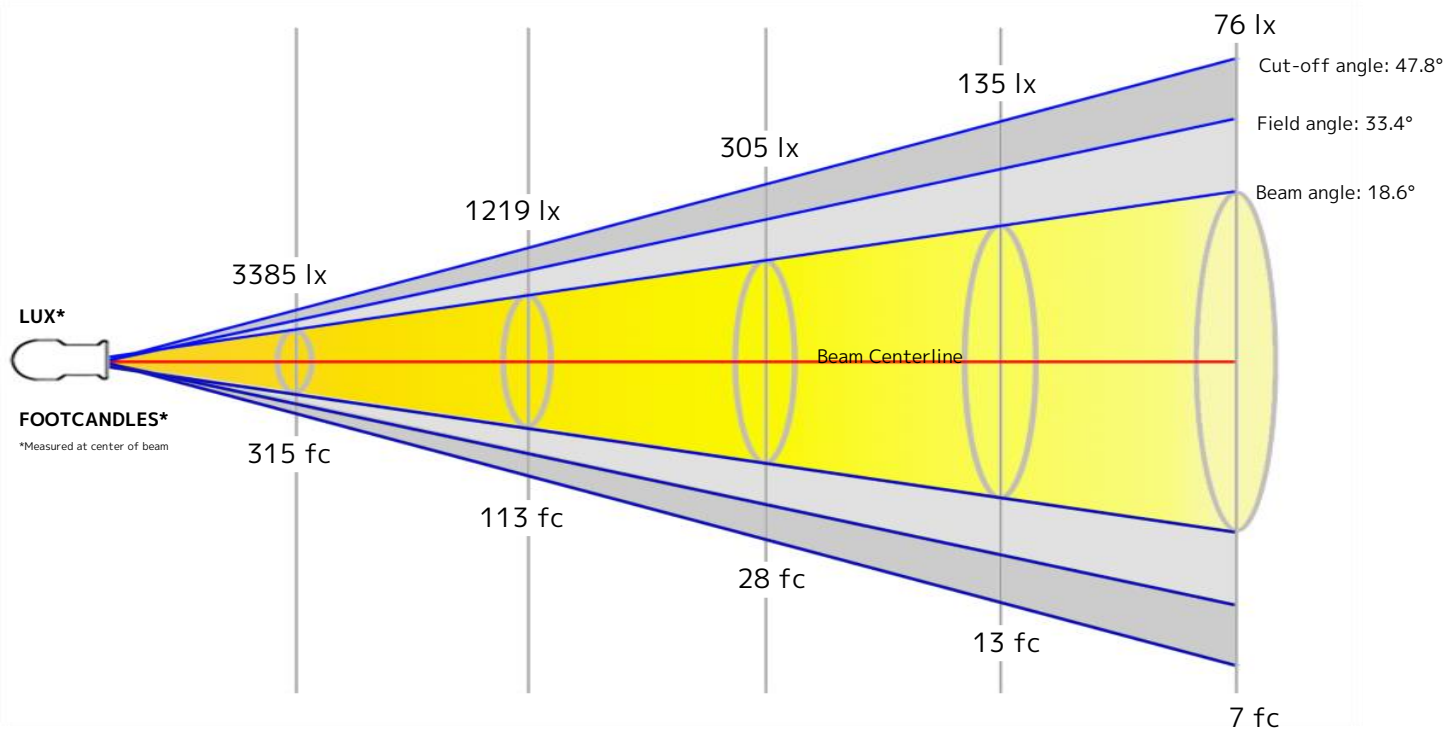
Power: 75.0 W

Supply Voltage: 119 V

Current: 0.637 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1m	1.6 m	3.3 m	4.9 m	6.5 m



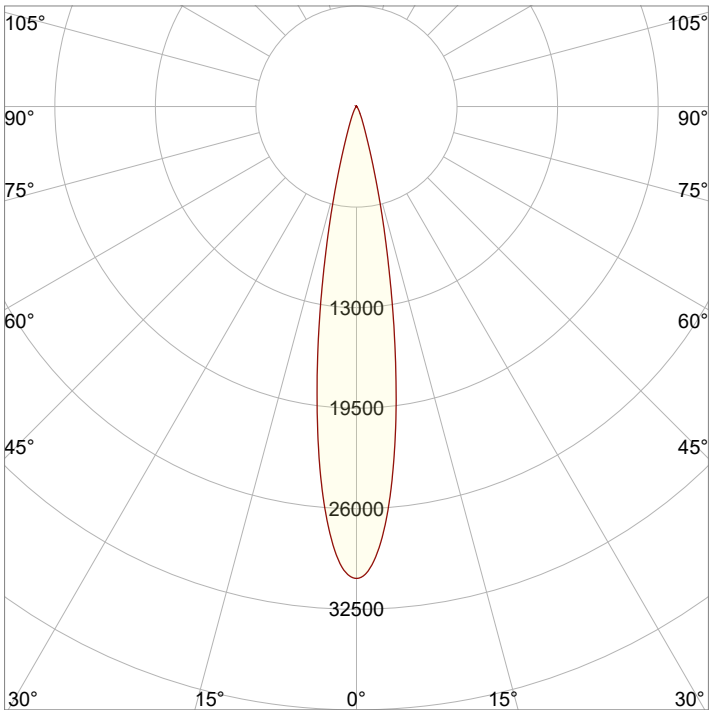
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.2 ft	5.4 ft	10.7 ft	16.1 ft	21.5 ft

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	30467	7617	3385	1904	1219	846	622	476	376	305	252	212	180	155	135	119	105	94	84	76
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	2830.5	707.6	314.5	176.9	113.2	78.6	57.8	44.2	34.9	28.3	23.4	19.7	16.7	14.4	12.6	11.1	9.8	8.7	7.8	7.1

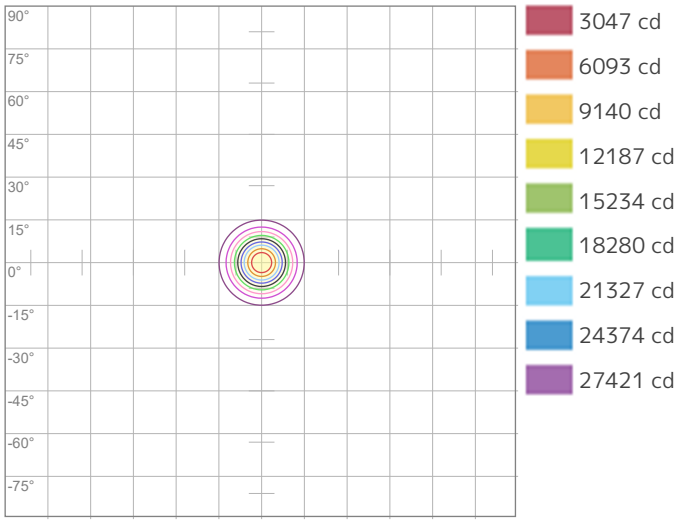
Measurement Date: 8/14/2024

Angular Distribution



Beam Angle - 50%
18.6°
Field Angle - 10%
33.4°
Cutoff Angle - 2.5%
47.8°

ISO Diagrams

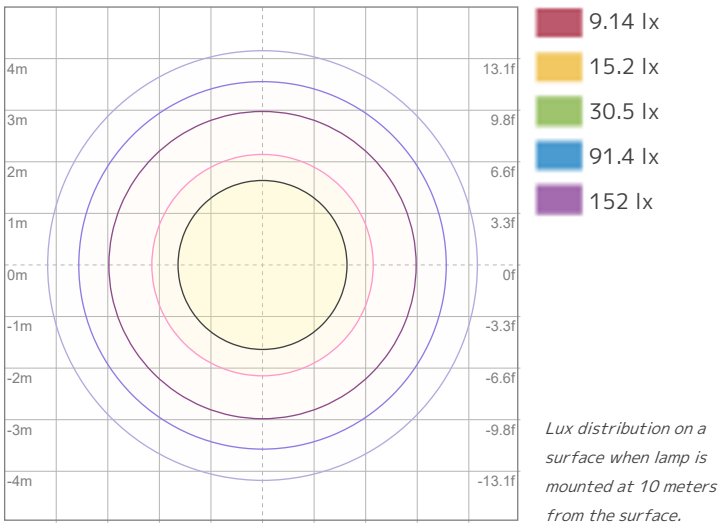


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 30467 cd



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

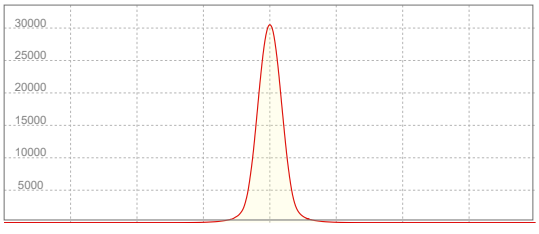
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 305 lx

Linear Distribution



Peak Candela

30493 cd

Calculate Center Beam Intensities

lux = 30493 / distance(m)^2

fc = 30493 / distance(ft)^2

Measurement Date: 8/14/2024

Key Measurements

Output

Total Lumen Output: 3826 lm

Peak Intensity: 29514 cd

Beam

Beam Angle (50%): 18.6°

Field Angle (10%): 33.5°

Cutoff Angle (2.5%): 48°

Color

Color Temperature: 8553 K

CRI: 88.2

TLCI: 85

TM30 R_F: 87.0

TM30 R_g: 104.5

Power Details

Efficacy: 52 Lumen/Watt

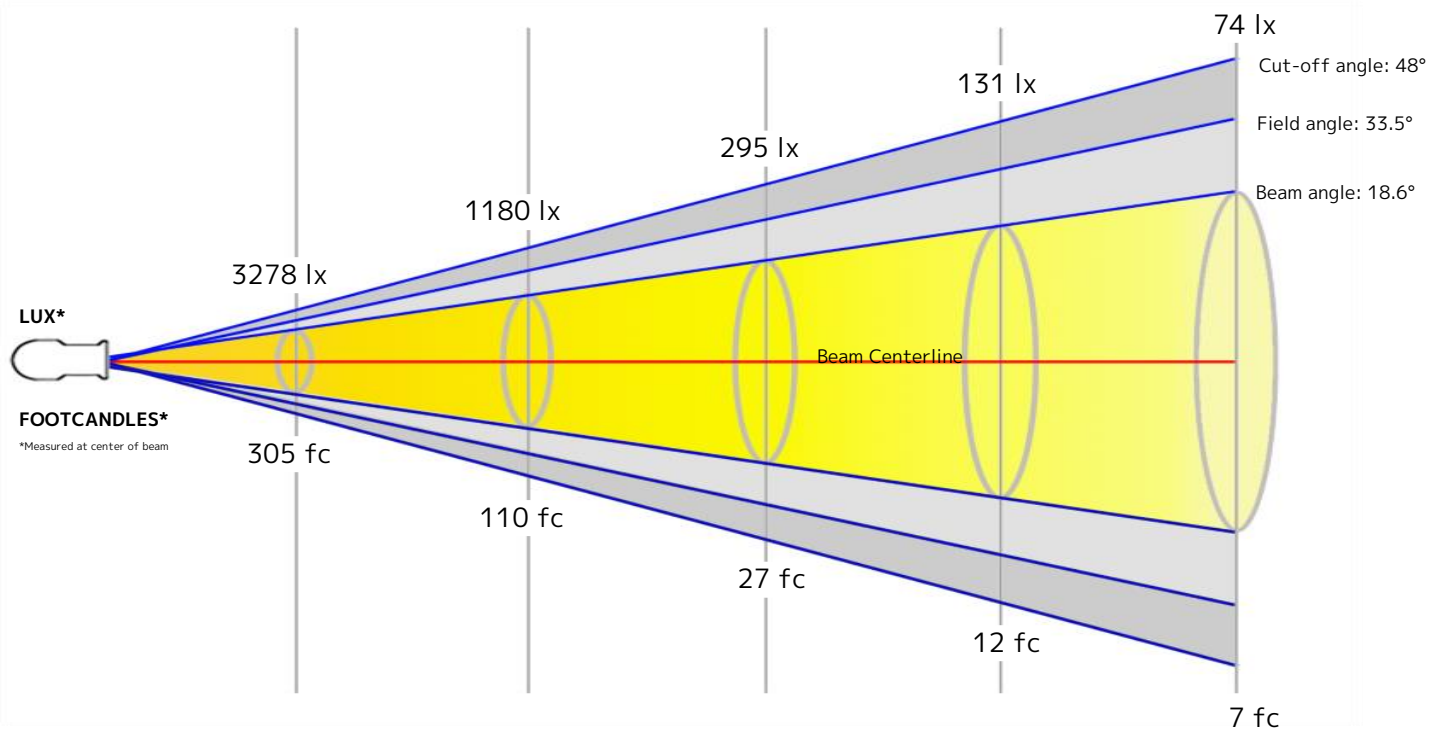
Power: 74.3 W

Supply Voltage: 119 V

Current: 0.631 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1m	1.6 m	3.3 m	4.9 m	6.6 m



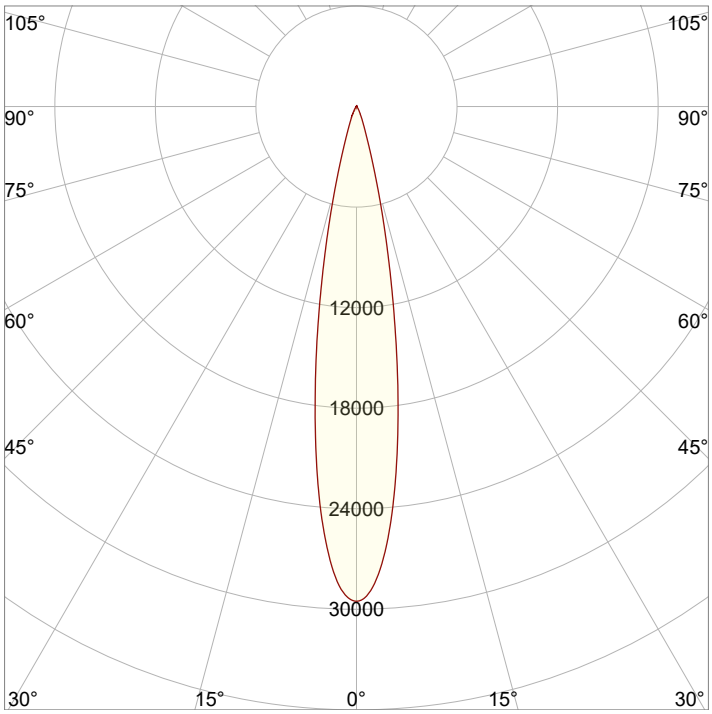
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	3.2 ft	5.4 ft	10.7 ft	16.1 ft	21.5 ft

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	29502	7375	3278	1844	1180	819	602	461	364	295	244	205	175	151	131	115	102	91	82	74
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	2740.8	685.2	304.5	171.3	109.6	76.1	55.9	42.8	33.8	27.4	22.7	19	16.2	14	12.2	10.7	9.5	8.5	7.6	6.9

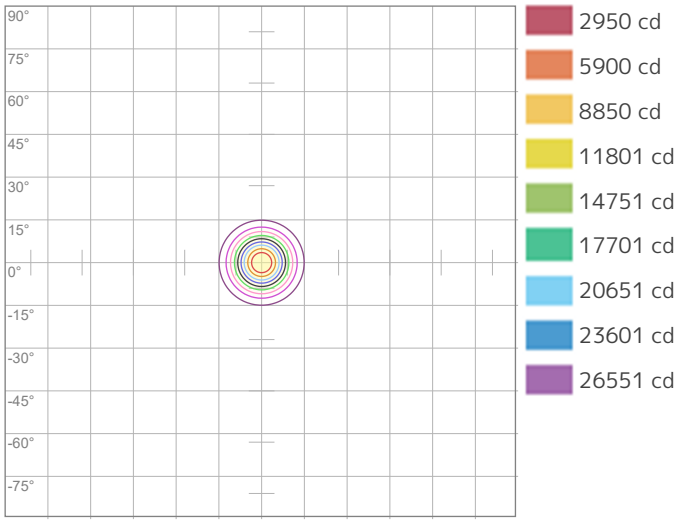
Measurement Date: 8/14/2024

Angular Distribution



Beam Angle - 50%
18.6°
Field Angle - 10%
33.5°
Cutoff Angle - 2.5%
48°

ISO Diagrams

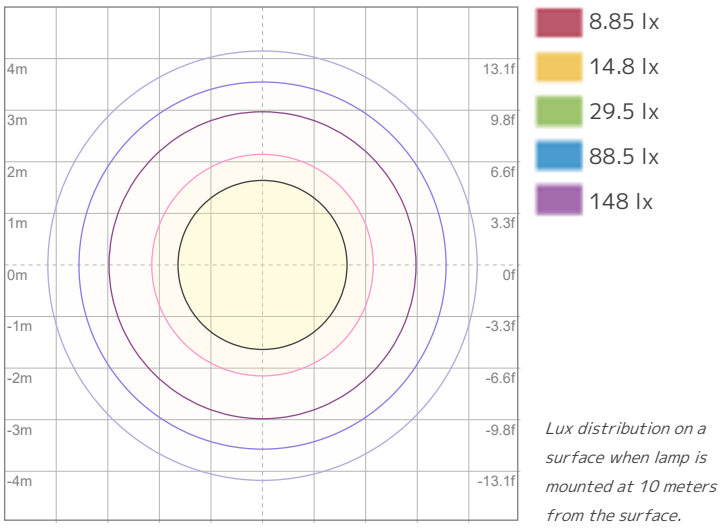


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 29502 cd



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

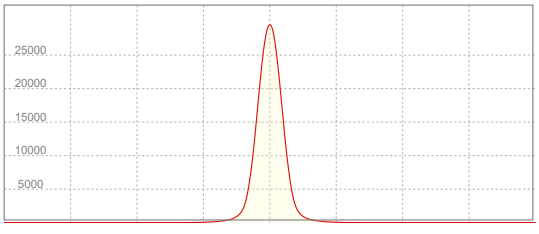
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 295 lx

Linear Distribution



Peak Candela

29514 cd

Calculate Center Beam Intensities

lux = 29514 / distance(m)^2

fc = 29514 / distance(ft)^2

Measurement Date: 8/14/2024

Six+ Bar S (Frost, Full Output, No UV)

Key Measurements

Output

Total Lumen Output: 3595 lm

Peak Intensity: 10213 cd

Beam

Beam Angle (50%): 29.6°

Field Angle (10%): 58.1°

Cutoff Angle (2.5%): 81.7°

Color

Color Temperature: 7170 K

CRI: 69.0

TLCI: 78

TM30 R_F: 78.6

TM30 R_g: 119.6

Power Details

Efficacy: 41 Lumen/Watt

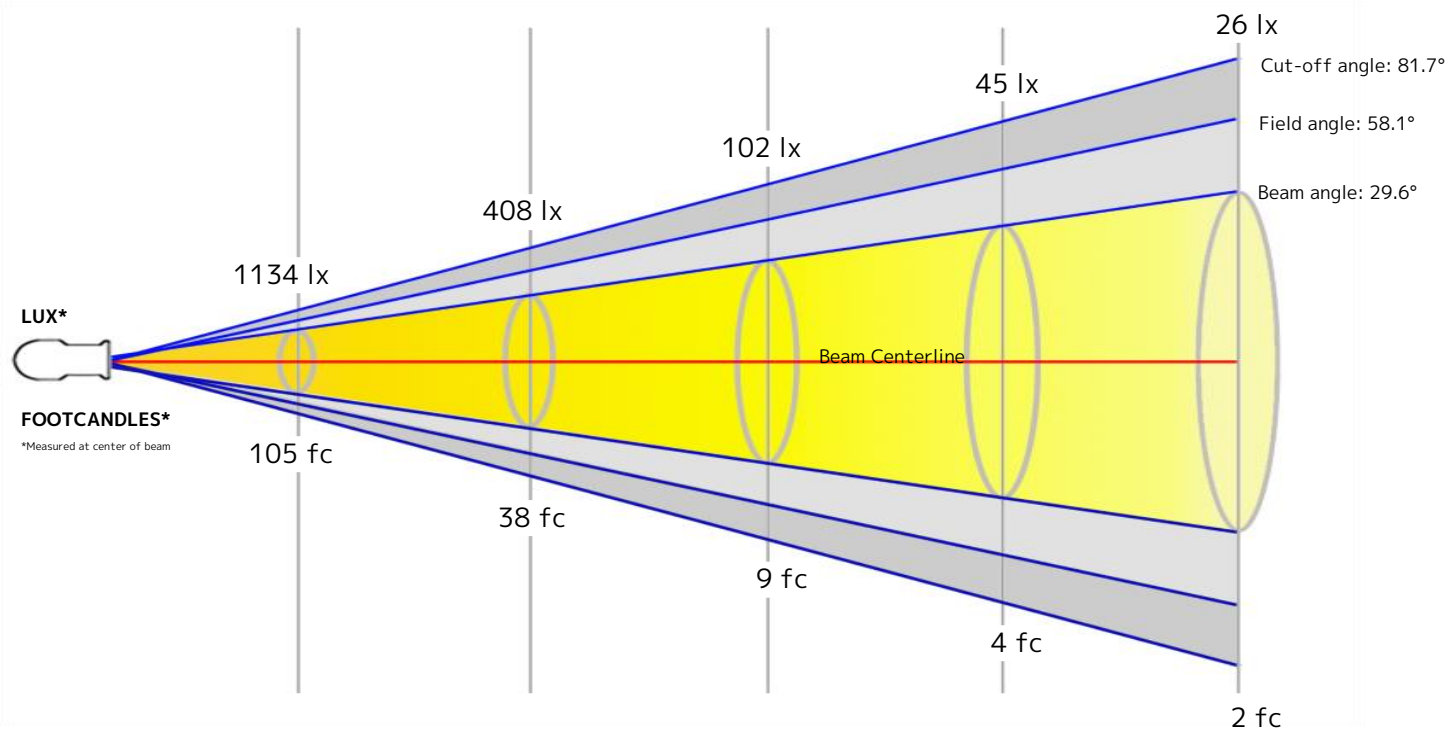
Power: 87.1 W

Supply Voltage: 119 V

Current: 0.740 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.6 m	2.6 m	5.3 m	7.9 m	10.6 m



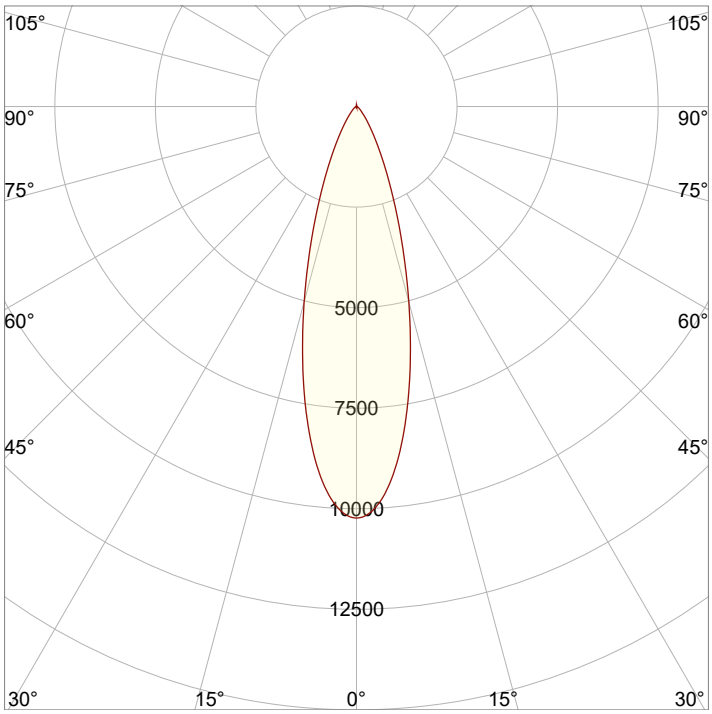
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	5.2 ft	8.7 ft	17.4 ft	26 ft	34.7 ft

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	10210	2553	1134	638	408	284	208	160	126	102	84	71	60	52	45	40	35	32	28	26
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	948.6	237.1	105.4	59.3	37.9	26.3	19.4	14.8	11.7	9.5	7.8	6.6	5.6	4.8	4.2	3.7	3.3	2.9	2.6	2.4

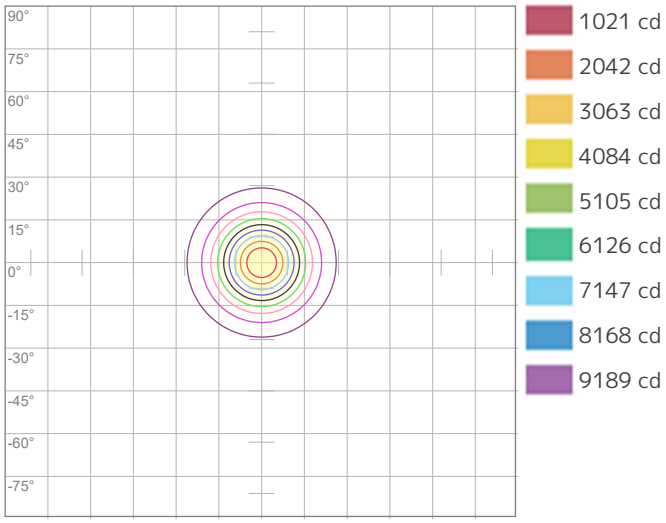
Measurement Date: 8/15/2024

Angular Distribution



Beam Angle - 50%
29.6°
Field Angle - 10%
58.1°
Cutoff Angle - 2.5%
81.7°

ISO Diagrams

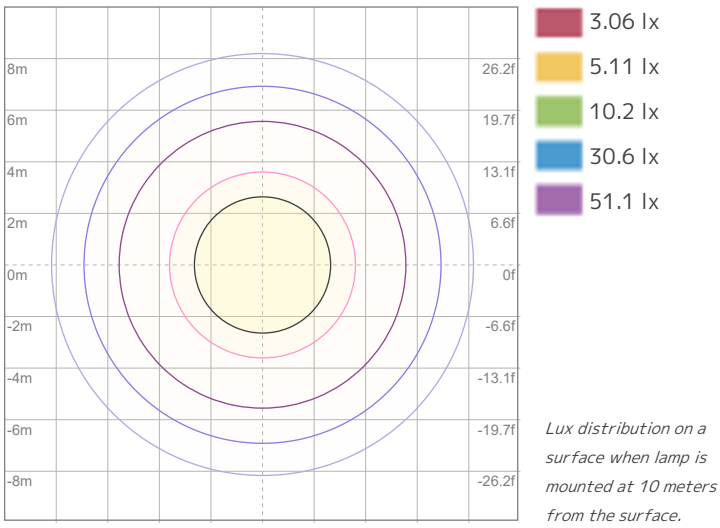


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 10210 cd



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

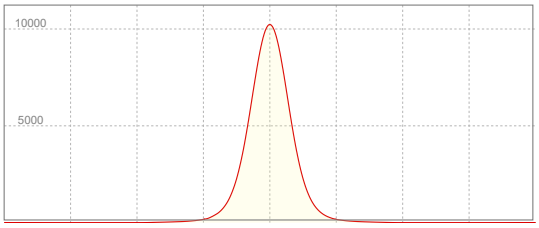
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 102 lx

Linear Distribution



Peak Candela
10213 cd

Calculate Center Beam Intensities

lux = 10213 / distance(m)^2

fc = 10213 / distance(ft)^2

Measurement Date: 8/15/2024

Six+ Bar S (Frost, Full Output)

Key Measurements

Output

Total Lumen Output: 3542 lm

Peak Intensity: 10046 cd

Beam

Beam Angle (50%): 29.6°

Field Angle (10%): 58.2°

Cutoff Angle (2.5%): 81.7°

Color

Color Temperature: 7594 K

CRI: 67.6

TLCI: 77

TM30 R_F: 77.3

TM30 R_g: 120.1

Power Details

Efficacy: 36 Lumen/Watt

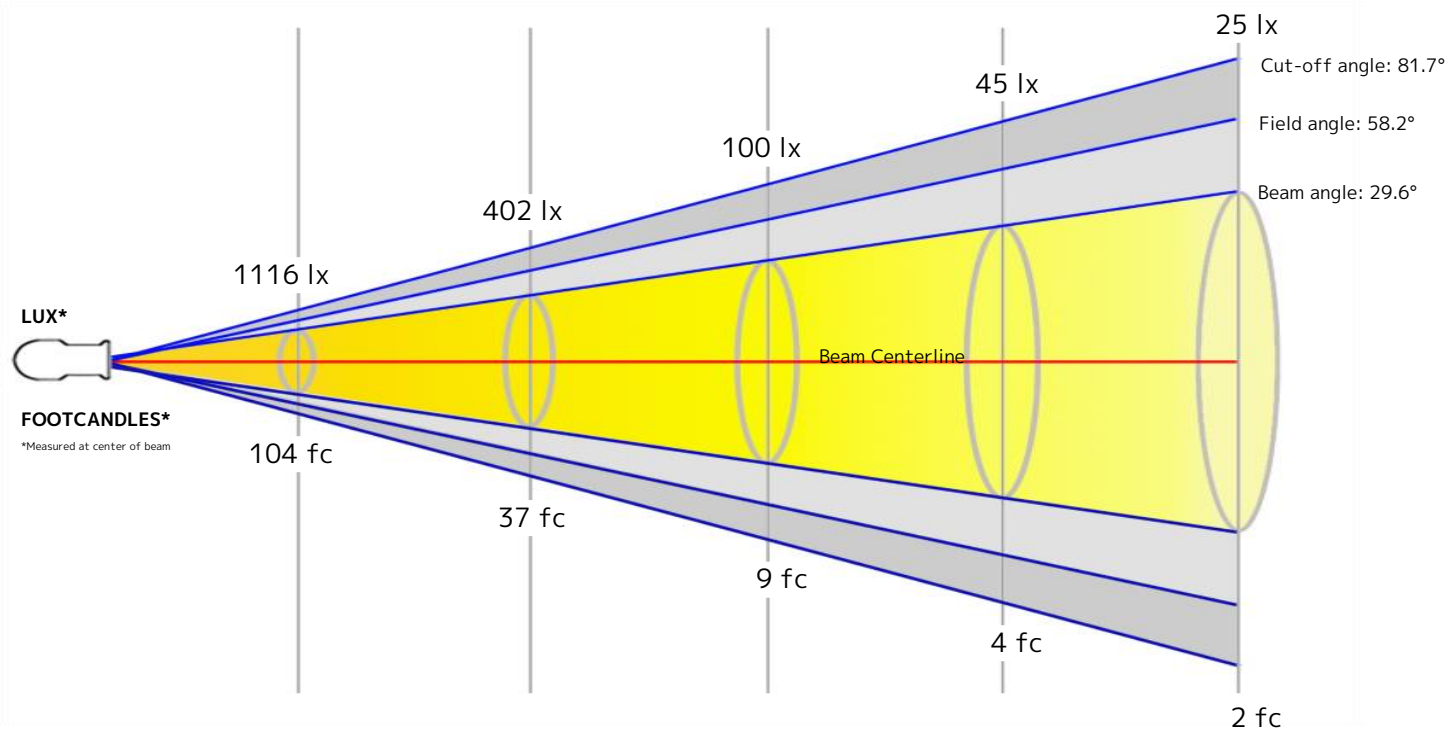
Power: 98.4 W

Supply Voltage: 118 V

Current: 0.839 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.6 m	2.6 m	5.3 m	7.9 m	10.6 m



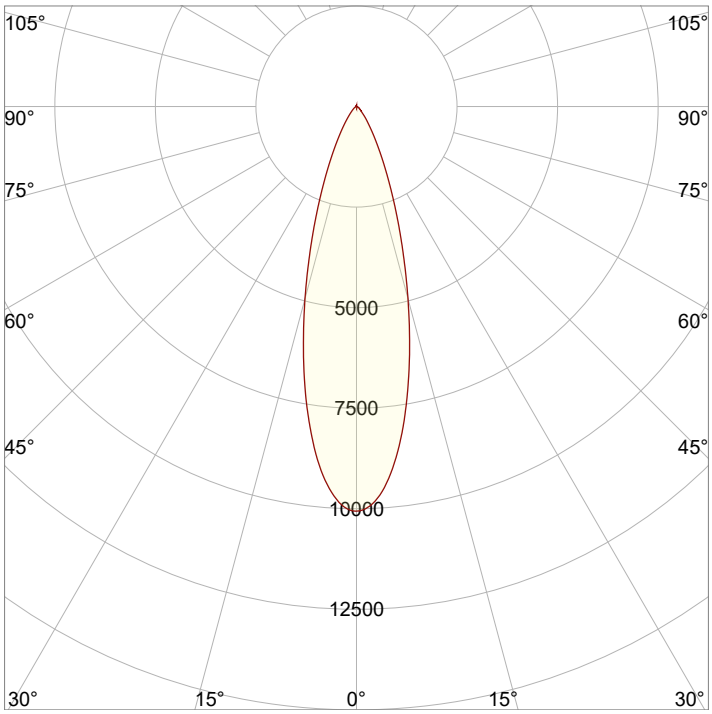
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	5.2 ft	8.7 ft	17.4 ft	26 ft	34.7 ft

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	10041	2510	1116	628	402	279	205	157	124	100	83	70	59	51	45	39	35	31	28	25
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	932.8	233.2	103.6	58.3	37.3	25.9	19	14.6	11.5	9.3	7.7	6.5	5.5	4.8	4.1	3.6	3.2	2.9	2.6	2.3

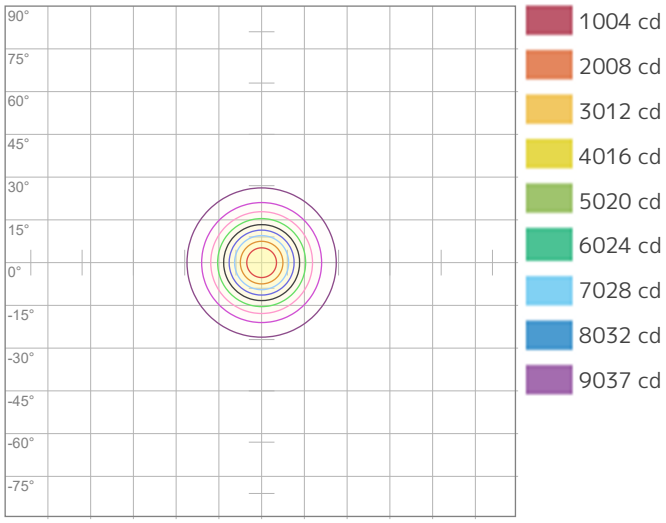
Measurement Date: 8/15/2024

Angular Distribution



Beam Angle - 50%
29.6°
Field Angle - 10%
58.2°
Cutoff Angle - 2.5%
81.7°

ISO Diagrams

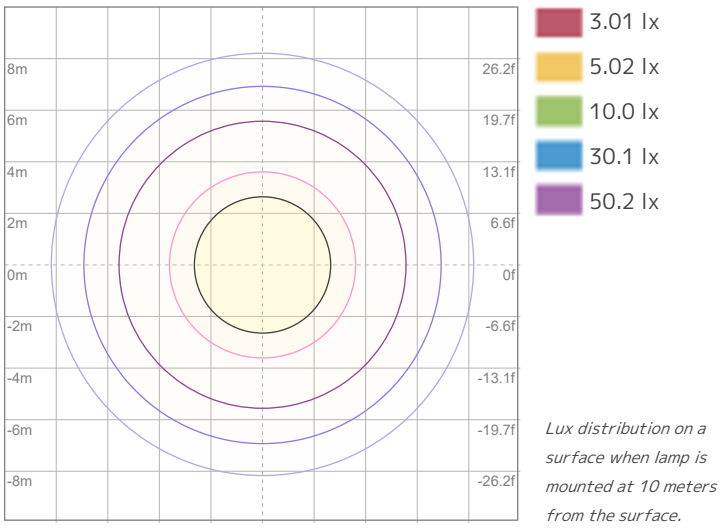


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 10041 cd



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

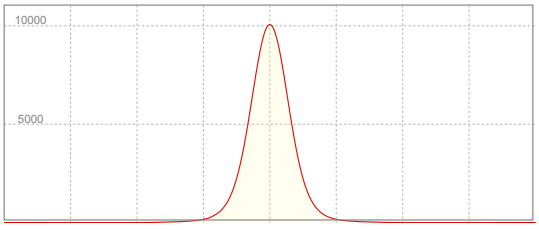
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 100 lx

Linear Distribution



Peak Candela
10046 cd

Calculate Center Beam Intensities

lux = 10046 / distance(m)^2

fc = 10046 / distance(ft)^2

Measurement Date: 8/15/2024

Key Measurements

Output

Total Lumen Output: 2682 lm

Peak Intensity: 7689 cd

Beam

Beam Angle (50%): 29.5°

Field Angle (10%): 58°

Cutoff Angle (2.5%): 81.3°

Color

Color Temperature: 2650 K

CRI: 86.6

TLCI: 75

TM30 R_F: 89.3

TM30 R_g: 108.5

Power Details

Efficacy: 41 Lumen/Watt

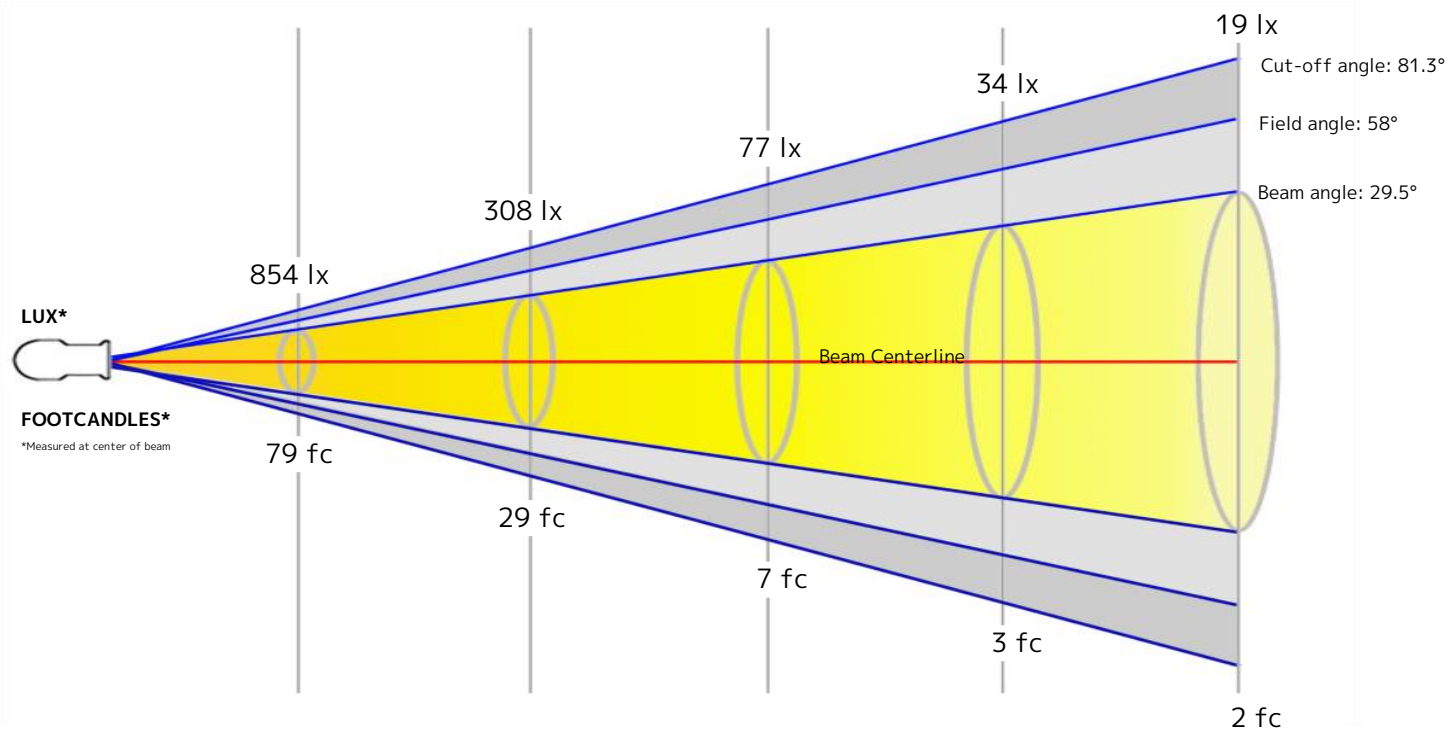
Power: 64.7 W

Supply Voltage: 119 V

Current: 0.550 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.6 m	2.6 m	5.3 m	7.9 m	10.5 m



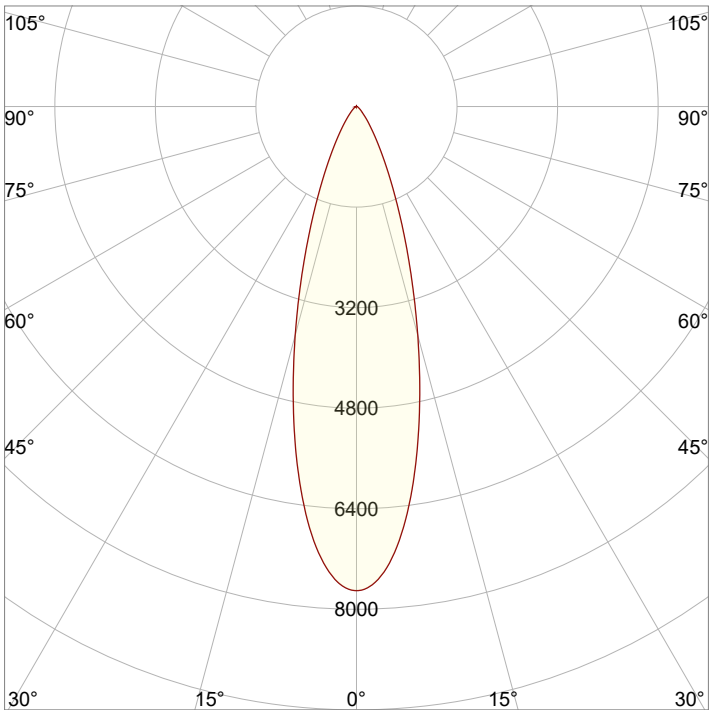
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	5.2 ft	8.6 ft	17.3 ft	25.9 ft	34.6 ft

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	7689	1922	854	481	308	214	157	120	95	77	64	53	45	39	34	30	27	24	21	19
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	714.3	178.6	79.4	44.6	28.6	19.8	14.6	11.2	8.8	7.1	5.9	5	4.2	3.6	3.2	2.8	2.5	2.2	2	1.8

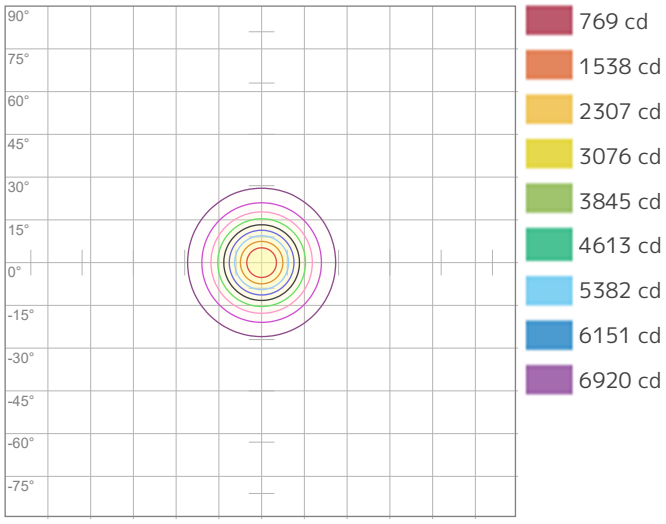
Measurement Date: 8/15/2024

Angular Distribution



Beam Angle - 50%
29.5°
Field Angle - 10%
58°
Cutoff Angle - 2.5%
81.3°

ISO Diagrams

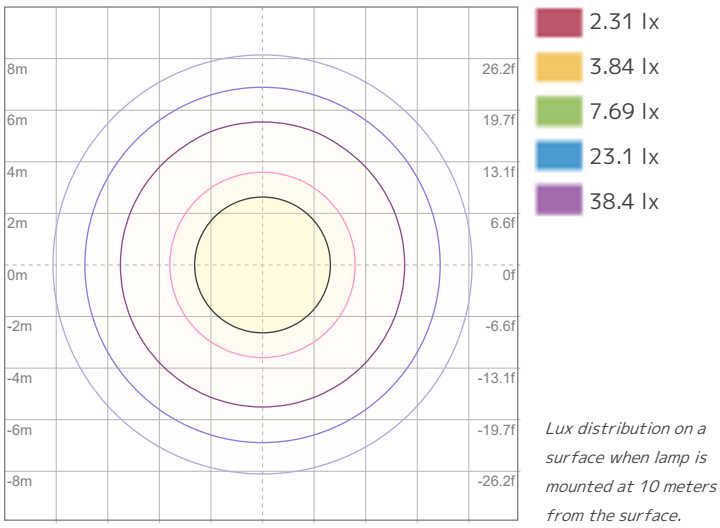


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 7689 cd



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

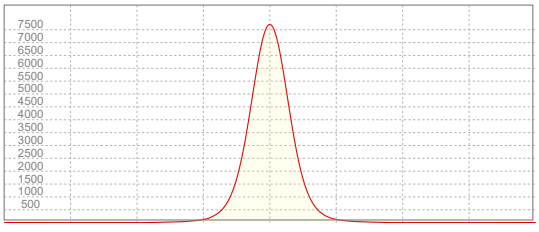
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 76.9 lx

Linear Distribution



Peak Candela

7689 cd

Calculate Center Beam Intensities

lux = 7689 / distance(m)^2

fc = 7689 / distance(ft)^2

Measurement Date: 8/15/2024

Key Measurements

Output

Total Lumen Output: 3022 lm

Peak Intensity: 8621 cd

Beam

Beam Angle (50%): 29.6°

Field Angle (10%): 58.1°

Cutoff Angle (2.5%): 81.5°

Color

Color Temperature: 3156 K

CRI: 89.2

TLCI: 79

TM30 R_F: 90.8

TM30 R_g: 108.1

Power Details

Efficacy: 47 Lumen/Watt

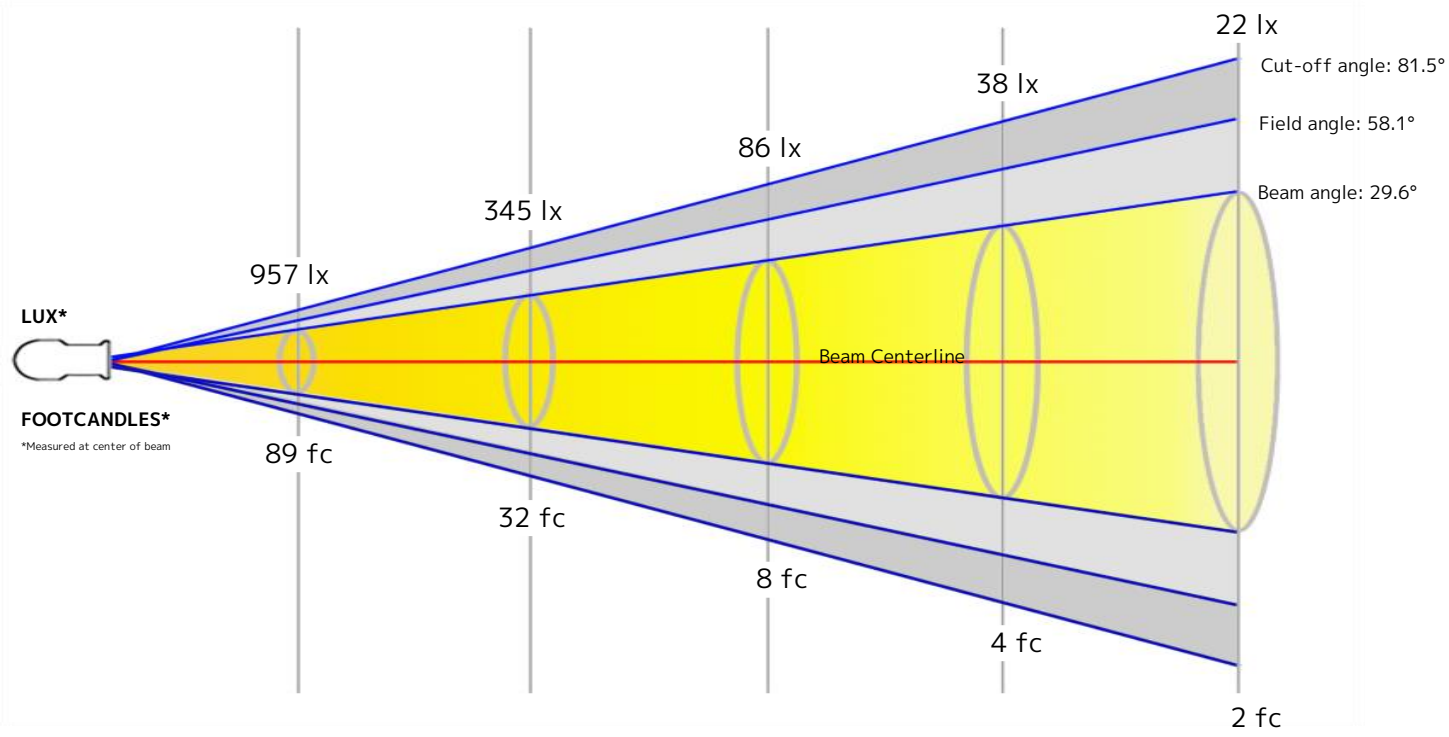
Power: 64.7 W

Supply Voltage: 120 V

Current: 0.549 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.6 m	2.6 m	5.3 m	7.9 m	10.6 m



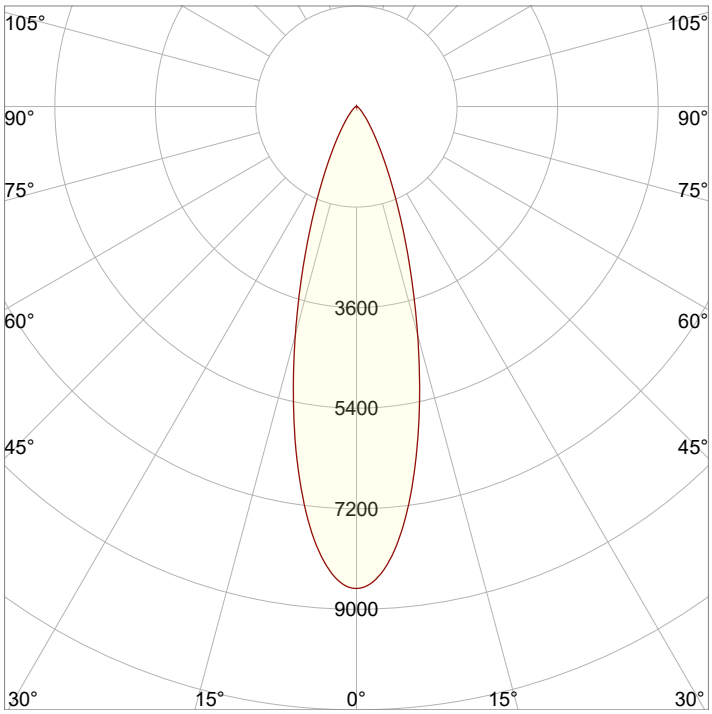
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	5.2 ft	8.7 ft	17.3 ft	26 ft	34.6 ft

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	8614	2154	957	538	345	239	176	135	106	86	71	60	51	44	38	34	30	27	24	22
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	800.3	200.1	88.9	50	32	22.2	16.3	12.5	9.9	8	6.6	5.6	4.7	4.1	3.6	3.1	2.8	2.5	2.2	2

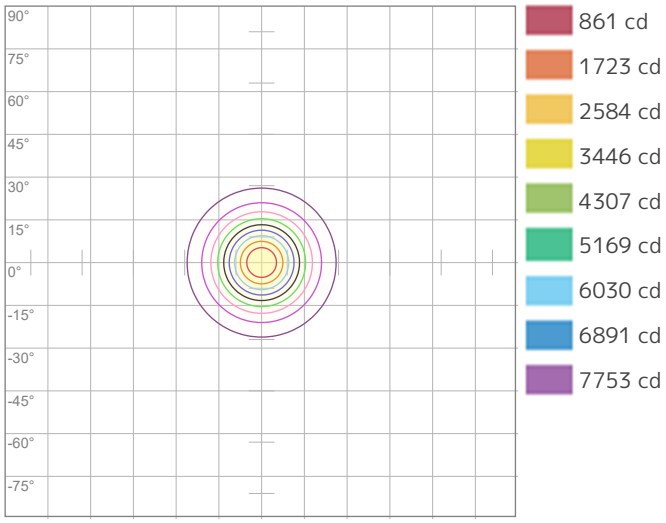
Measurement Date: 8/15/2024

Angular Distribution



Beam Angle - 50%
29.6°
Field Angle - 10%
58.1°
Cutoff Angle - 2.5%
81.5°

ISO Diagrams

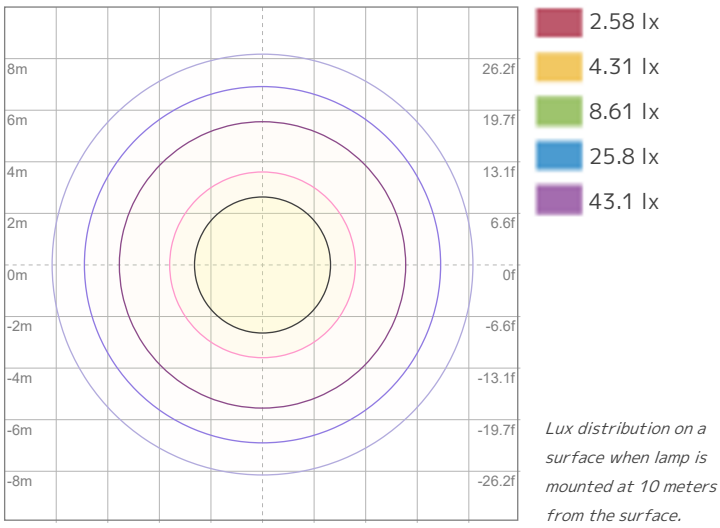


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 8614 cd



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

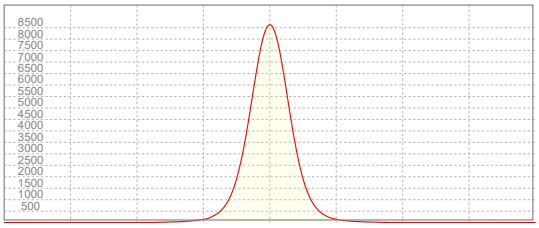
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 86.1 lx

Linear Distribution



Peak Candela
8621 cd

Calculate Center Beam Intensities

lux = 8621 / distance(m)^2

fc = 8621 / distance(ft)^2

Measurement Date: 8/15/2024

Key Measurements

Output

Total Lumen Output: 3250 lm

Peak Intensity: 9145 cd

Beam

Beam Angle (50%): 29.7°

Field Angle (10%): 58.3°

Cutoff Angle (2.5%): 82.1°

Color

Color Temperature: 4450 K

CRI: 90.7

TLCI: 80

TM30 R_F: 90.6

TM30 R_g: 107.5

Power Details

Efficacy: 48 Lumen/Watt

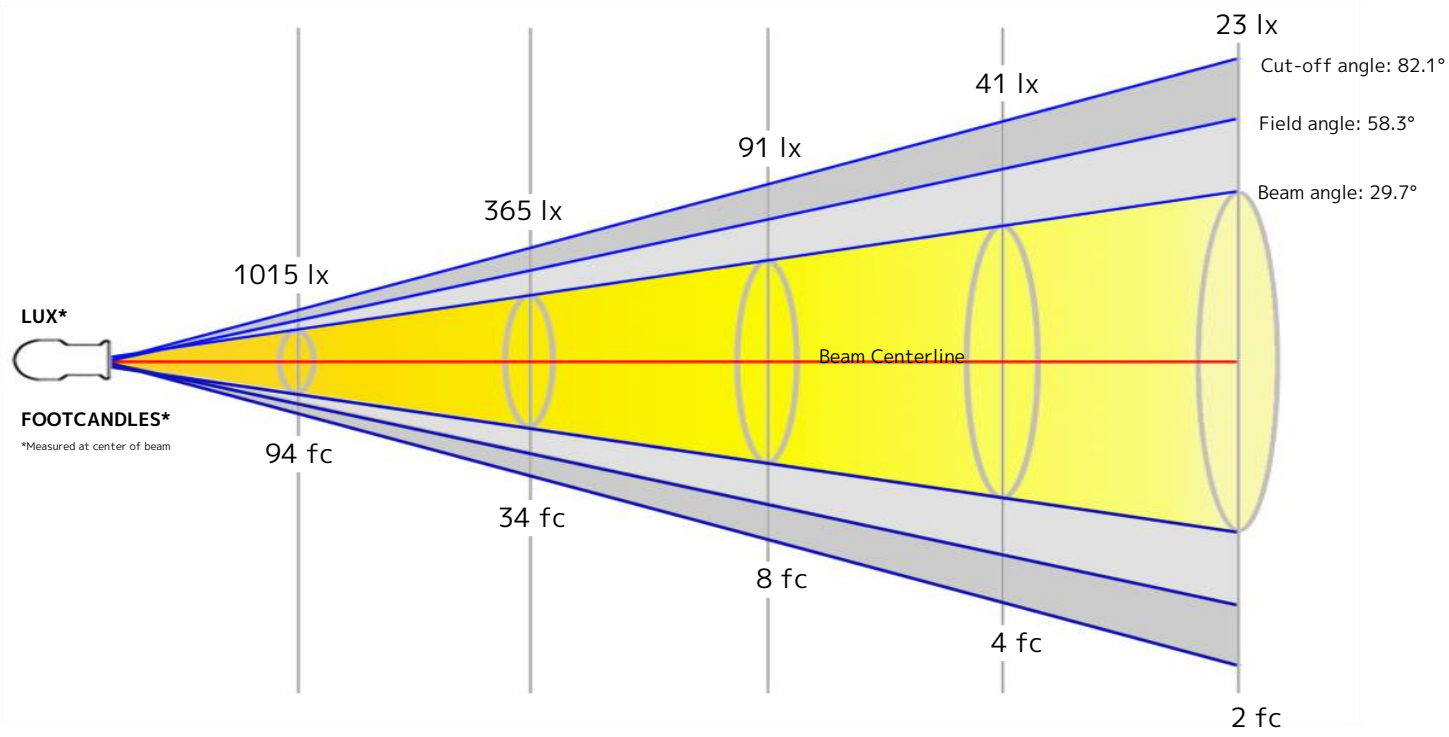
Power: 68.3 W

Supply Voltage: 119 V

Current: 0.585 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.6 m	2.7 m	5.3 m	8 m	10.6 m



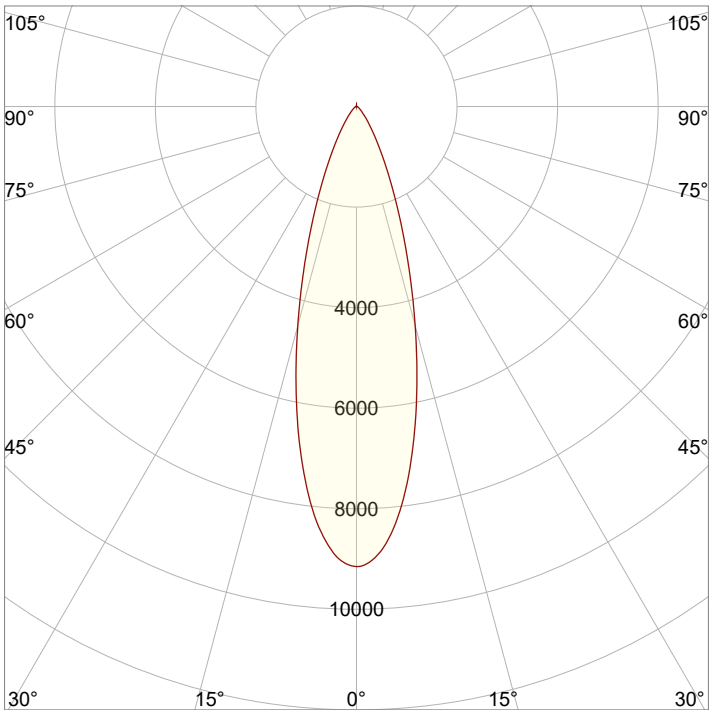
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	5.2 ft	8.7 ft	17.4 ft	26.1 ft	34.8 ft

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	9135	2284	1015	571	365	254	186	143	113	91	75	63	54	47	41	36	32	28	25	23
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	848.7	212.2	94.3	53	33.9	23.6	17.3	13.3	10.5	8.5	7	5.9	5	4.3	3.8	3.3	2.9	2.6	2.4	2.1

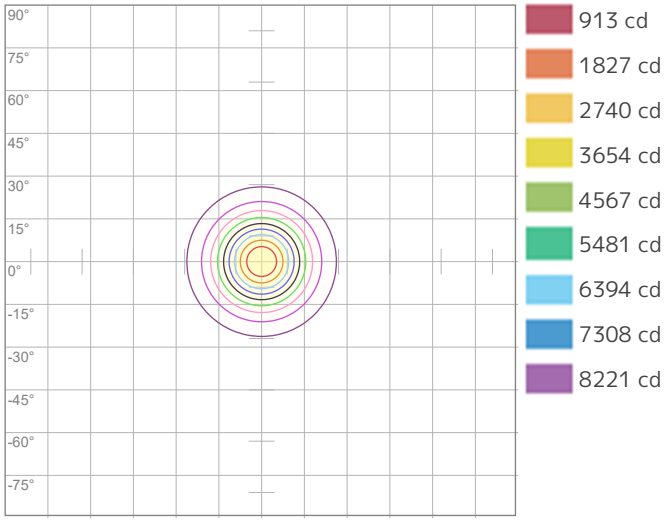
Measurement Date: 8/15/2024

Angular Distribution



Beam Angle - 50%
29.7°
Field Angle - 10%
58.3°
Cutoff Angle - 2.5%
82.1°

ISO Diagrams

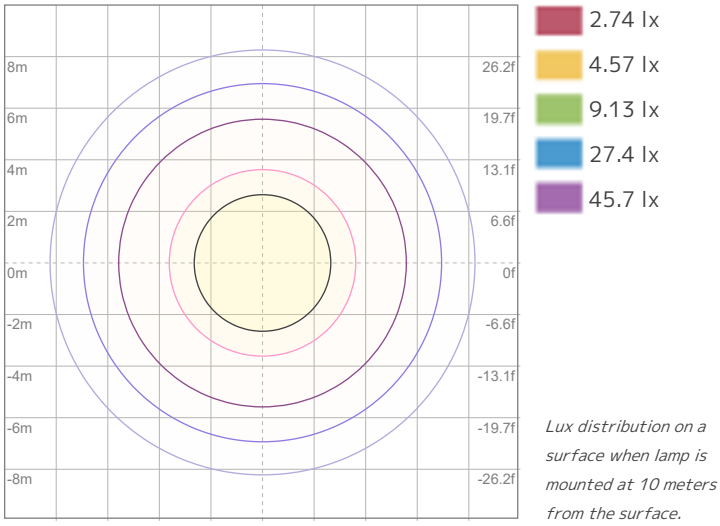


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 9135 cd



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

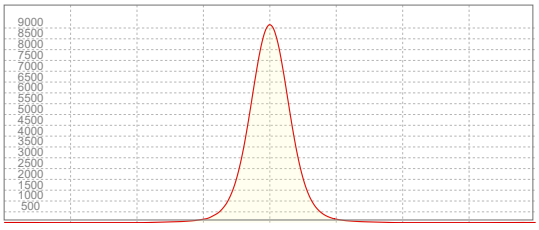
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 91.3 lx

Linear Distribution



Peak Candela
9145 cd

Calculate Center Beam Intensities

lux = 9145 / distance(m)^2

fc = 9145 / distance(ft)^2

Measurement Date: 8/15/2024

Key Measurements

Output

Total Lumen Output: 3494 lm

Peak Intensity: 9767 cd

Beam

Beam Angle (50%): 29.8°

Field Angle (10%): 58.5°

Cutoff Angle (2.5%): 82.4°

Color

Color Temperature: 5566 K

CRI: 89.4

TLCI: 82

TM30 R_F: 89.2

TM30 R_g: 107.3

Power Details

Efficacy: 47 Lumen/Watt

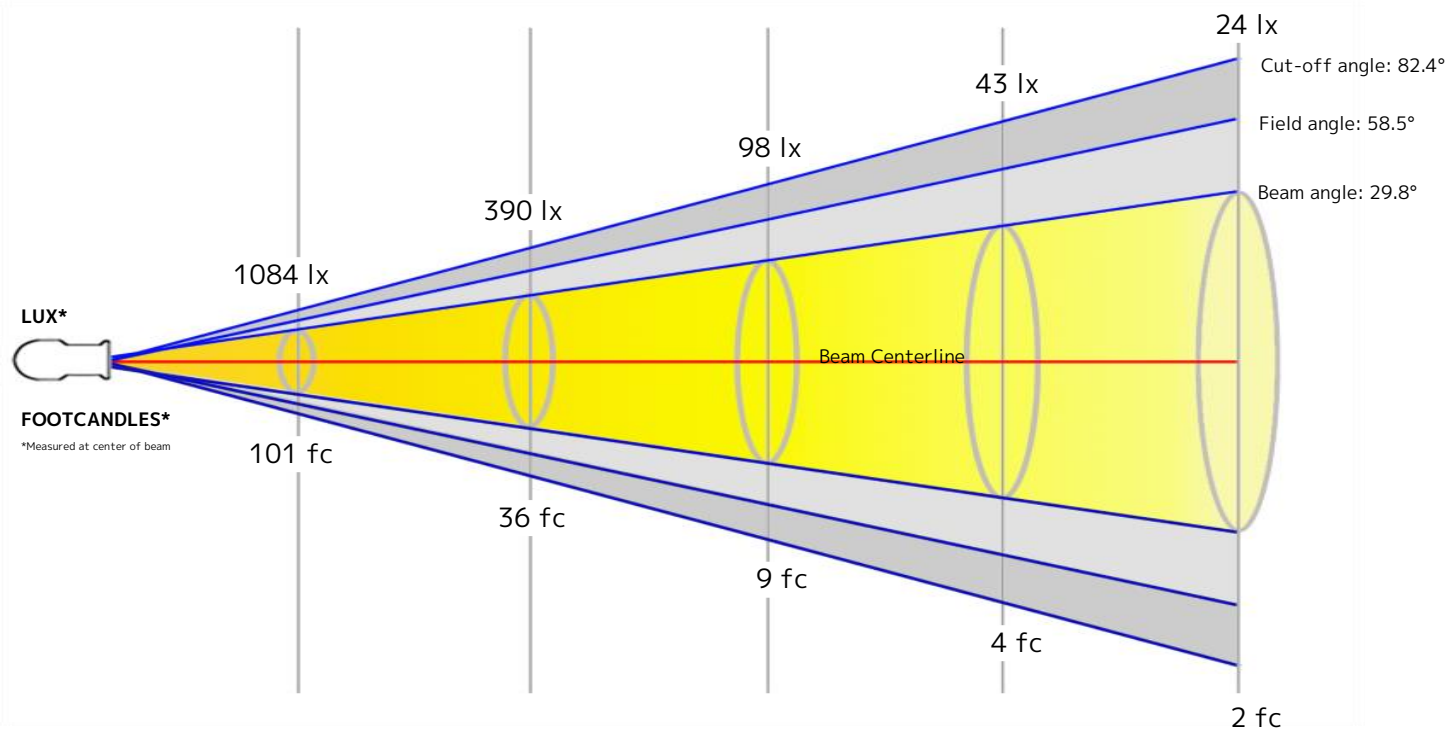
Power: 73.7 W

Supply Voltage: 119 V

Current: 0.626 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.6 m	2.7 m	5.3 m	8 m	10.6 m



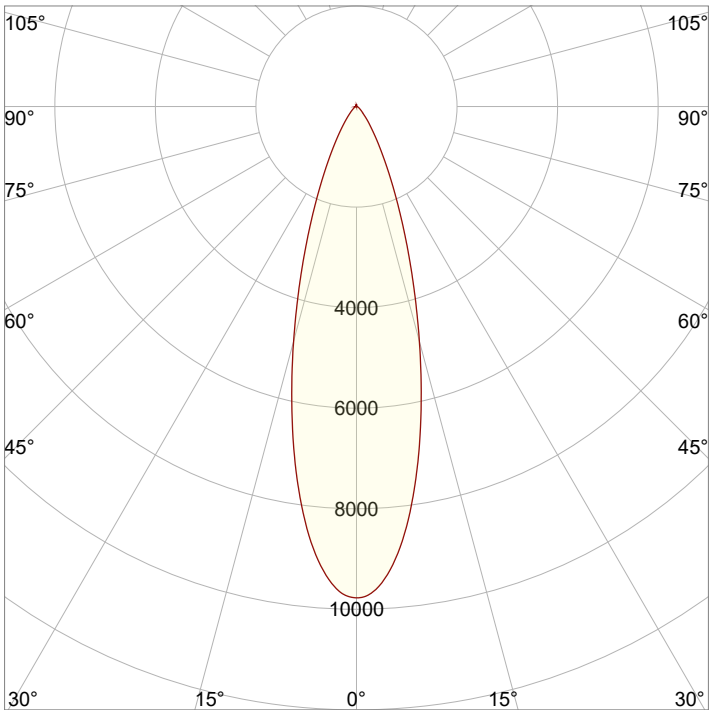
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	5.2 ft	8.7 ft	17.4 ft	26.1 ft	34.9 ft

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	9760	2440	1084	610	390	271	199	153	120	98	81	68	58	50	43	38	34	30	27	24
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	906.7	226.7	100.7	56.7	36.3	25.2	18.5	14.2	11.2	9.1	7.5	6.3	5.4	4.6	4	3.5	3.1	2.8	2.5	2.3

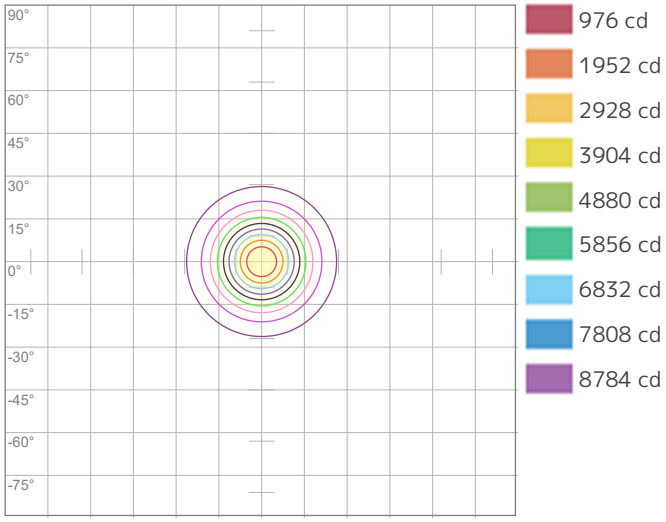
Measurement Date: 8/15/2024

Angular Distribution



Beam Angle - 50%
29.8°
Field Angle - 10%
58.5°
Cutoff Angle - 2.5%
82.4°

ISO Diagrams

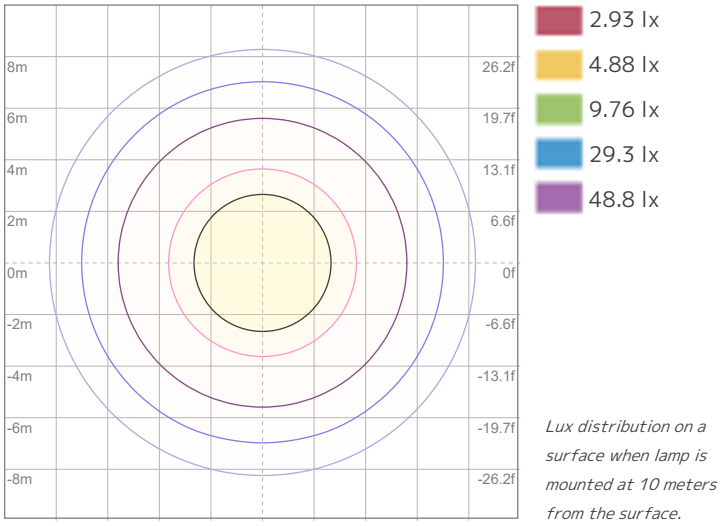


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 9760 cd



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

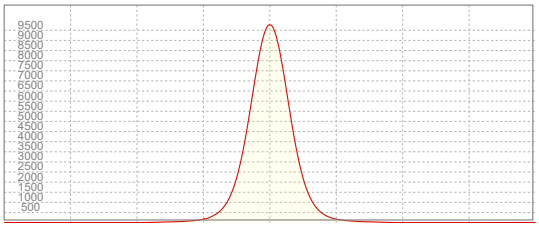
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 97.6 lx

Linear Distribution



Peak Candela
9767 cd

Calculate Center Beam Intensities

lux = 9767 / distance(m)^2

fc = 9767 / distance(ft)^2

Measurement Date: 8/15/2024

Six+ Bar S (Frost, 6000K)

Key Measurements

Output

Total Lumen Output: 3369 lm

Peak Intensity: 9487 cd

Beam

Beam Angle (50%): 29.7°

Field Angle (10%): 58.3°

Cutoff Angle (2.5%): 82°

Color

Color Temperature: 5912 K

CRI: 89.6

TLCI: 84

TM30 R_F: 88.8

TM30 R_g: 107.2

Power Details

Efficacy: 46 Lumen/Watt

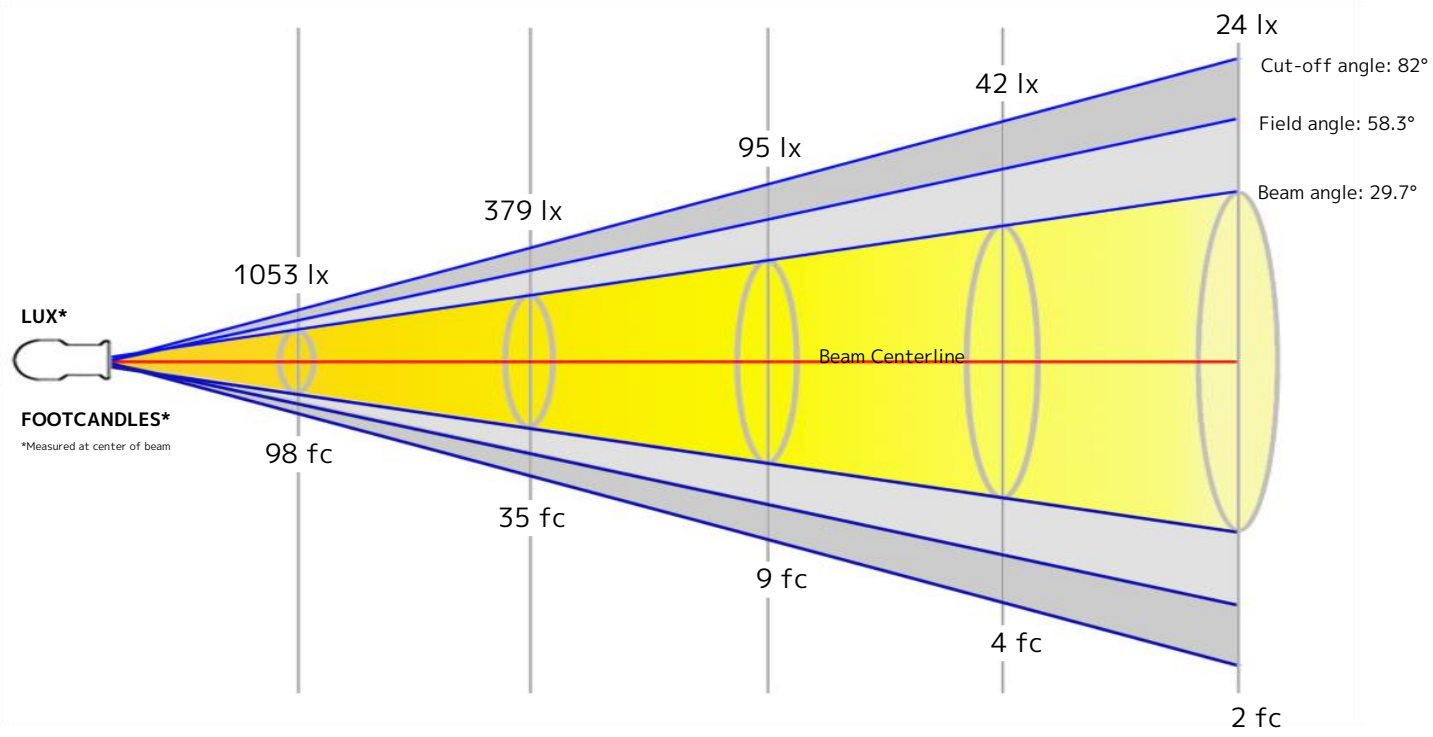
Power: 72.7 W

Supply Voltage: 119 V

Current: 0.618 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.6 m	2.7 m	5.3 m	8 m	10.6 m



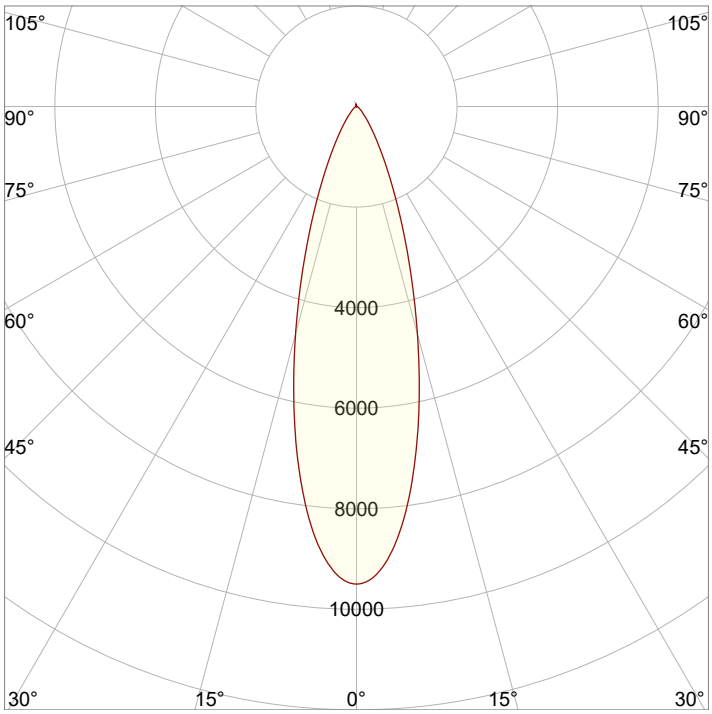
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	5.2 ft	8.7 ft	17.4 ft	26.1 ft	34.8 ft

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	9481	2370	1053	593	379	263	193	148	117	95	78	66	56	48	42	37	33	29	26	24
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	880.8	220.2	97.9	55	35.2	24.5	18	13.8	10.9	8.8	7.3	6.1	5.2	4.5	3.9	3.4	3	2.7	2.4	2.2

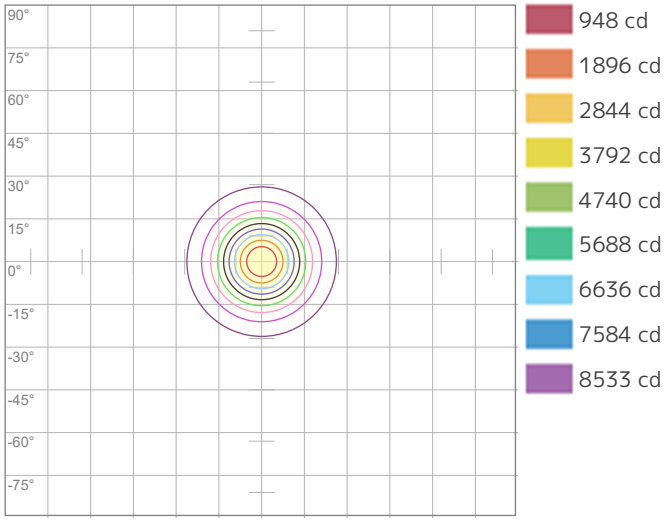
Measurement Date: 8/14/2024

Angular Distribution



Beam Angle - 50%
29.7°
Field Angle - 10%
58.3°
Cutoff Angle - 2.5%
82°

ISO Diagrams

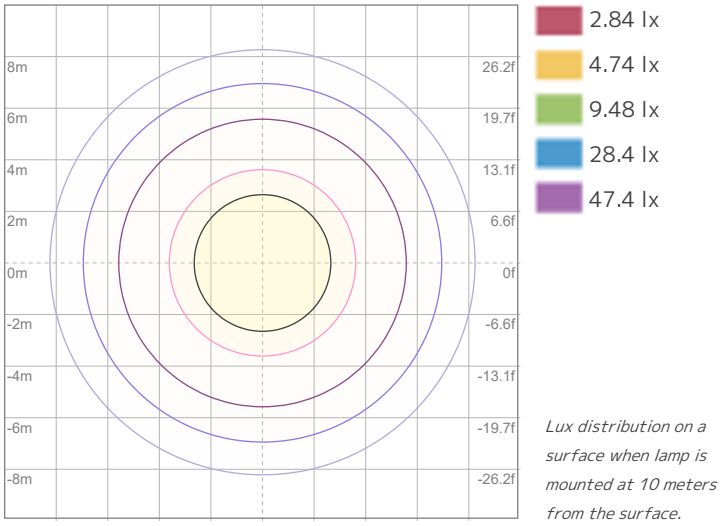


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 9481 cd



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

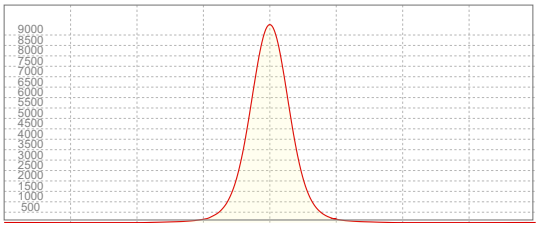
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 94.8 lx

Linear Distribution



Peak Candela
9487 cd

Calculate Center Beam Intensities

lux = 9487 / distance(m)^2

fc = 9487 / distance(ft)^2

Measurement Date: 8/14/2024

Six+ Bar S (Frost, 6500K)

Key Measurements

Output

Total Lumen Output: 3440 lm

Peak Intensity: 9644 cd

Beam

Beam Angle (50%): 29.7°

Field Angle (10%): 58.4°

Cutoff Angle (2.5%): 82.3°

Color

Color Temperature: 6475 K

CRI: 89.3

TLCI: 85

TM30 R_F: 88.4

TM30 R_g: 106.7

Power Details

Efficacy: 46 Lumen/Watt

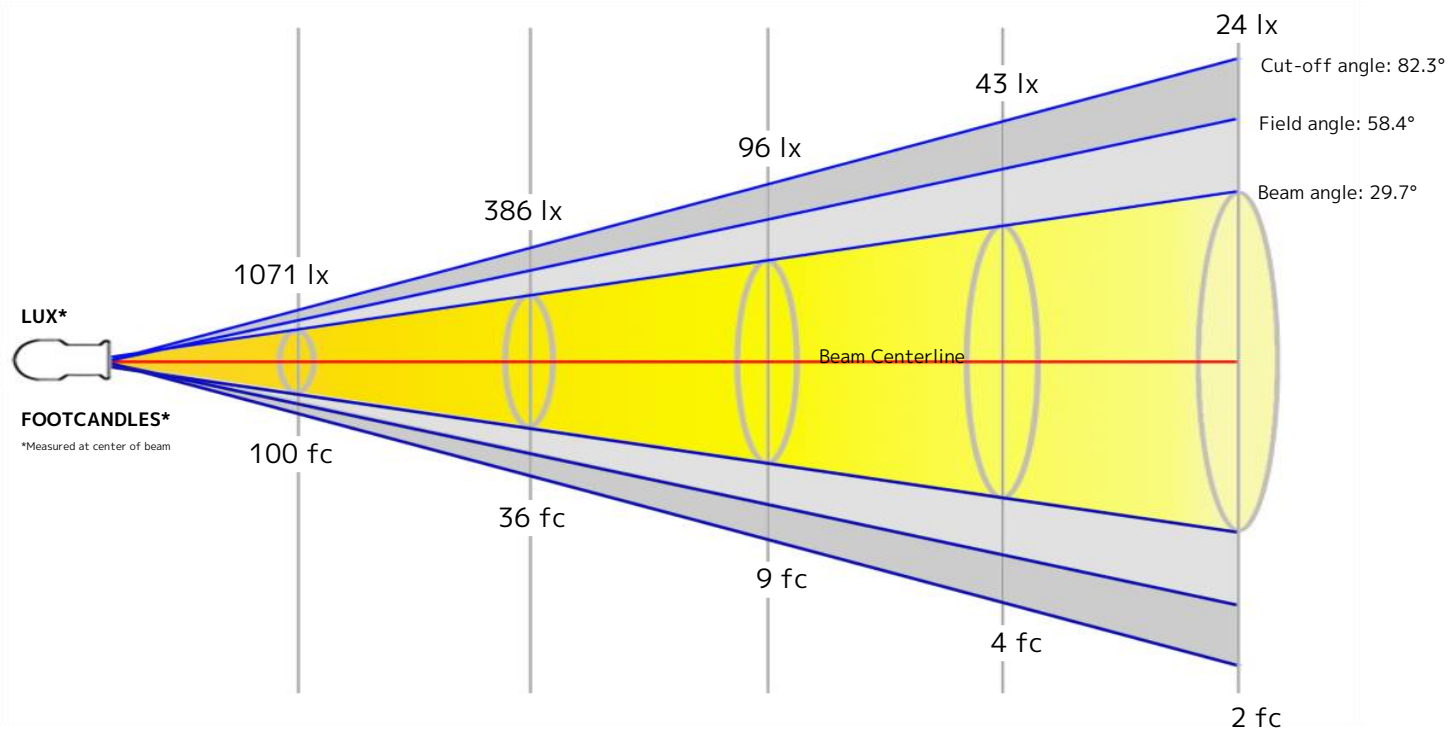
Power: 74.5 W

Supply Voltage: 119 V

Current: 0.634 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.6 m	2.7 m	5.3 m	8 m	10.6 m



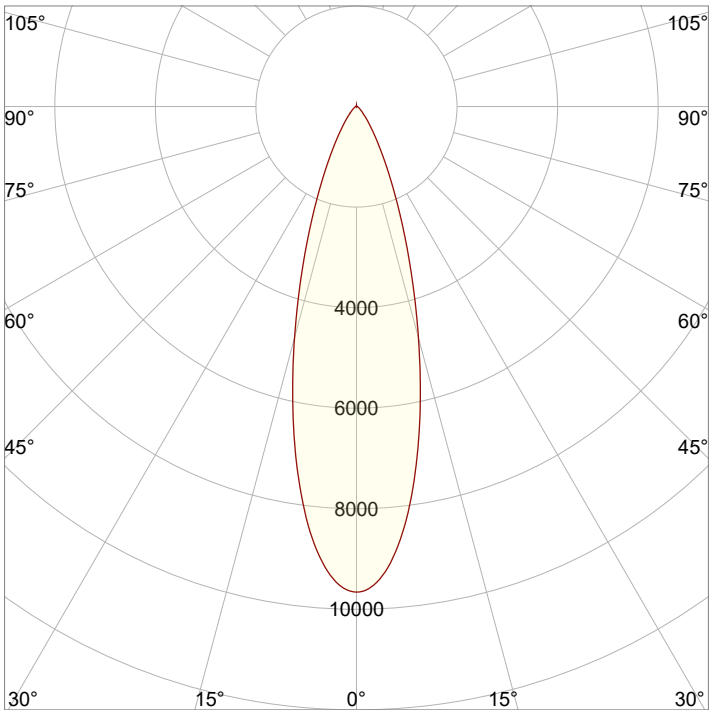
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	5.2 ft	8.7 ft	17.4 ft	26.1 ft	34.8 ft

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	9640	2410	1071	602	386	268	197	151	119	96	80	67	57	49	43	38	33	30	27	24
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	895.6	223.9	99.5	56	35.8	24.9	18.3	14	11.1	9	7.4	6.2	5.3	4.6	4	3.5	3.1	2.8	2.5	2.2

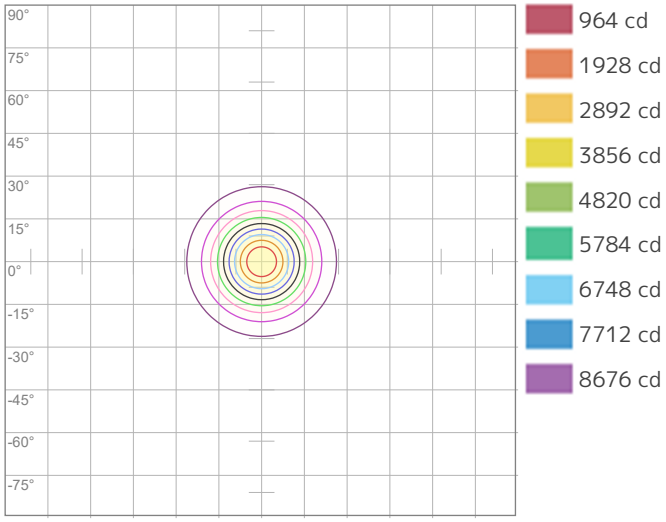
Measurement Date: 8/14/2024

Angular Distribution



Beam Angle - 50%
29.7°
Field Angle - 10%
58.4°
Cutoff Angle - 2.5%
82.3°

ISO Diagrams

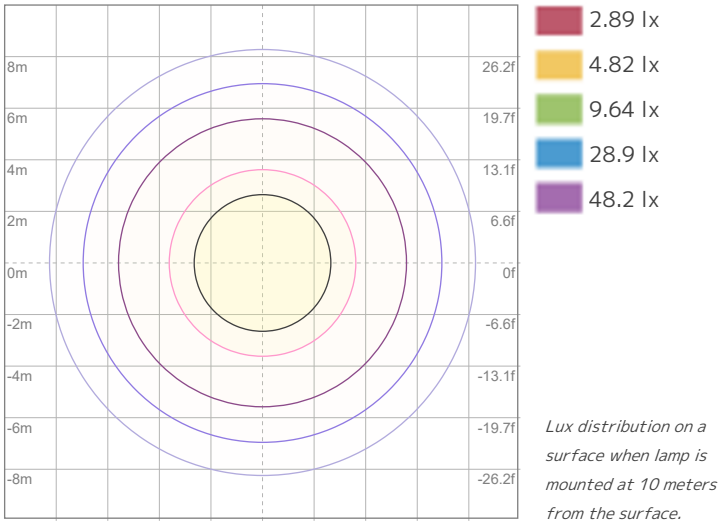


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 9640 cd



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

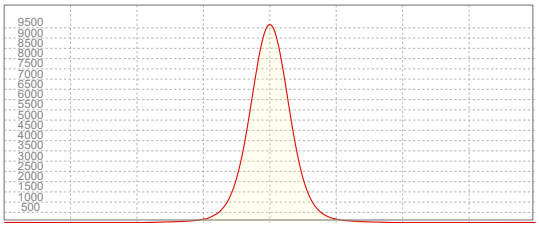
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 96.4 lx

Linear Distribution



Peak Candela
9644 cd

Calculate Center Beam Intensities

lux = 9644 / distance(m)^2

fc = 9644 / distance(ft)^2

Measurement Date: 8/14/2024

Key Measurements

Output

Total Lumen Output: 3371 lm

Peak Intensity: 9413 cd

Beam

Beam Angle (50%): 29.7°

Field Angle (10%): 58.5°

Cutoff Angle (2.5%): 82.4°

Color

Color Temperature: 8495 K

CRI: 88.1

TLCI: 85

TM30 R_F: 86.9

TM30 R_g: 104.5

Power Details

Efficacy: 46 Lumen/Watt

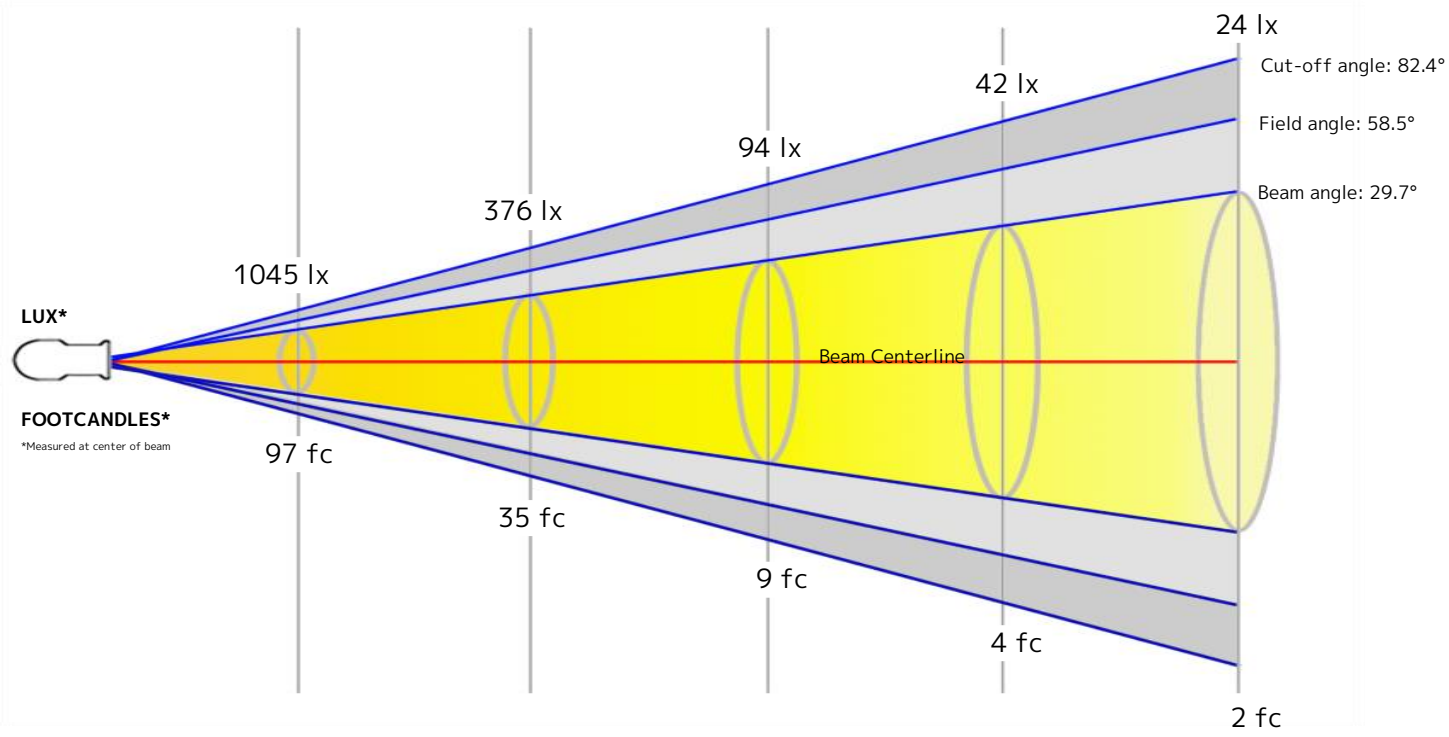
Power: 74.1 W

Supply Voltage: 119 V

Current: 0.630 A

Beam Details

Distance	3 m	5 m	10 m	15 m	20 m
Beam Width	1.6 m	2.7 m	5.3 m	8 m	10.6 m



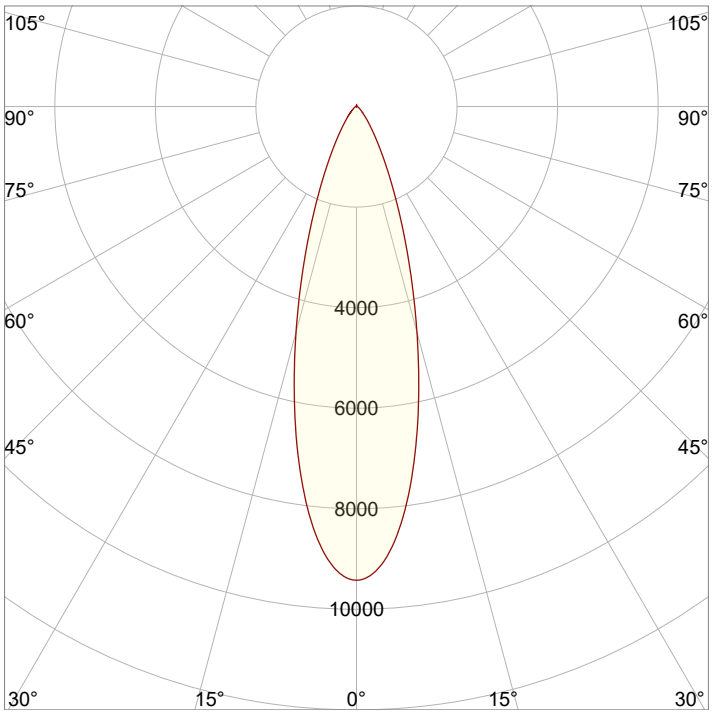
Distance	9.8 ft	16.4 ft	32.8 ft	49.2 ft	65.6 ft
Beam Width	5.2 ft	8.7 ft	17.4 ft	26.1 ft	34.8 ft

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	9405	2351	1045	588	376	261	192	147	116	94	78	65	56	48	42	37	33	29	26	24
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	873.8	218.4	97.1	54.6	35	24.3	17.8	13.7	10.8	8.7	7.2	6.1	5.2	4.5	3.9	3.4	3	2.7	2.4	2.2

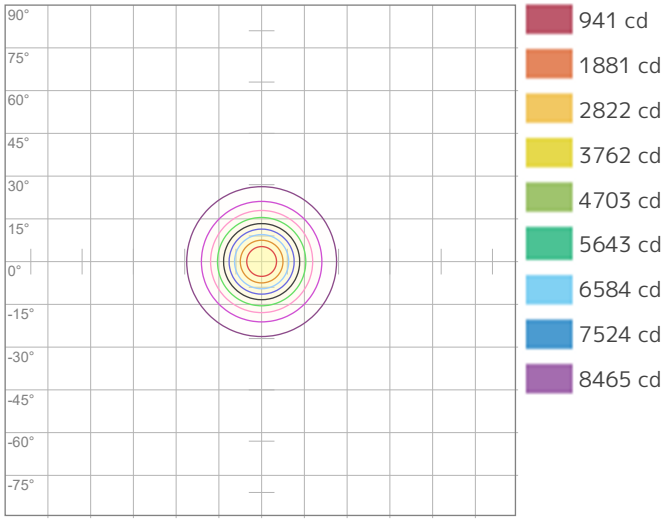
Measurement Date: 8/14/2024

Angular Distribution



Beam Angle - 50%
29.7°
Field Angle - 10%
58.5°
Cutoff Angle - 2.5%
82.4°

ISO Diagrams

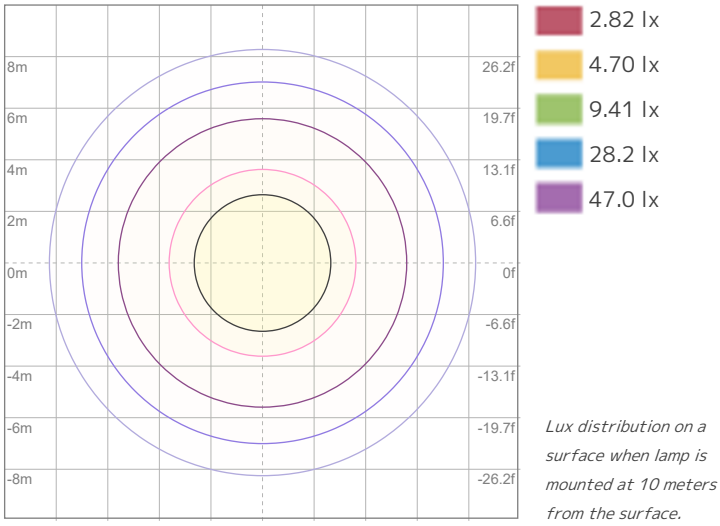


ISO Candela Diagram

Conditions:

Number of c-planes: 2

Candela at center: 9405 cd



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

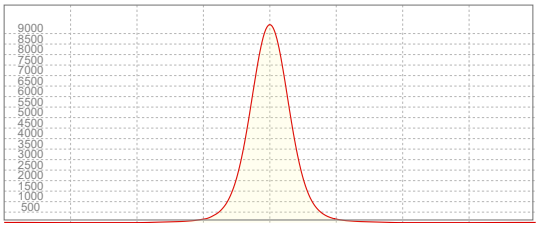
ISO LUX Diagram

Conditions:

Number of c-planes: 2

LUX at center: 94.1 lx

Linear Distribution



Peak Candela
9413 cd

Calculate Center Beam Intensities

lux = 9413 / distance(m)^2

fc = 9413 / distance(ft)^2

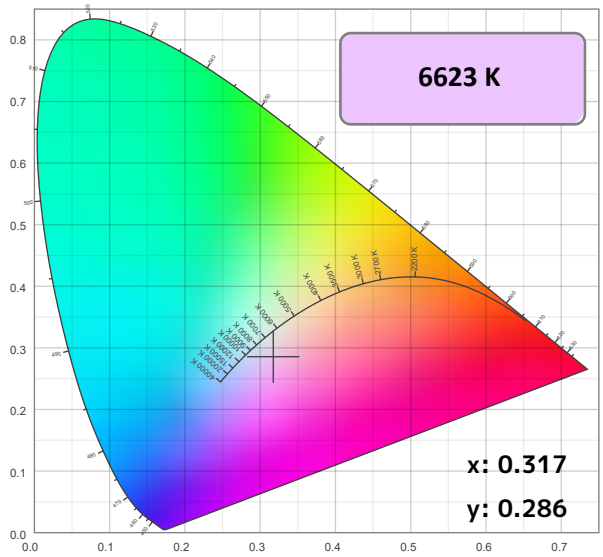
Measurement Date: 8/14/2024

Color Temperature: 6623K

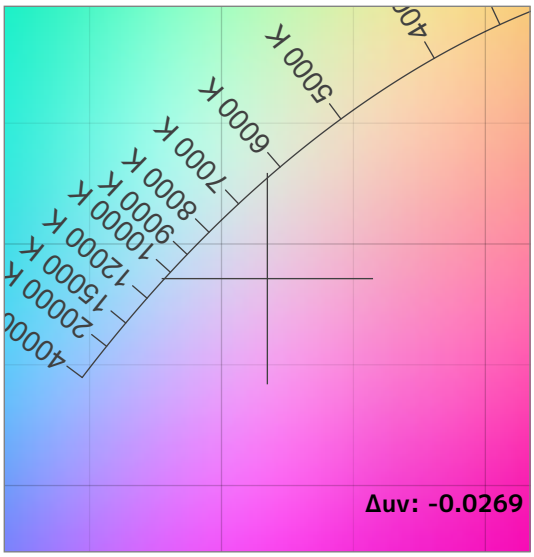
Accuracy Metric Overview

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
67.5	-44.7	78.4	120.6	75	86.3	0.317	0.286	-0.0269	11	42

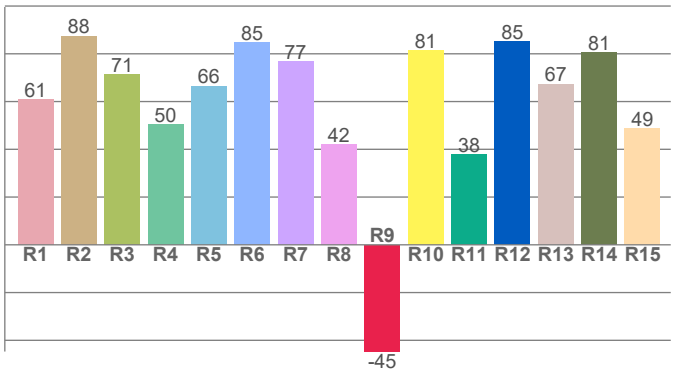
CIE 1931



CIE 1931 ZOOMED

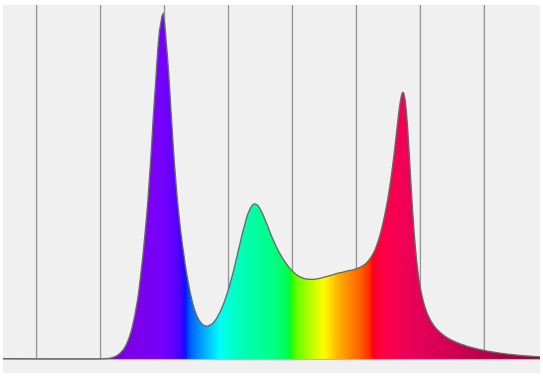


CRI: 67.5 (R1-R8)



Spectral Power Distribution (SPD)

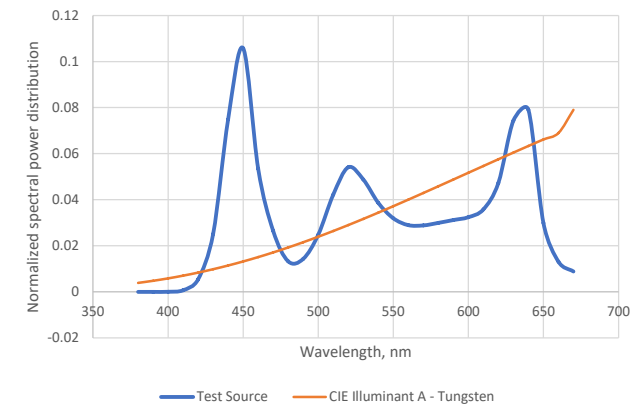
Dominant Wavelength 360 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 11

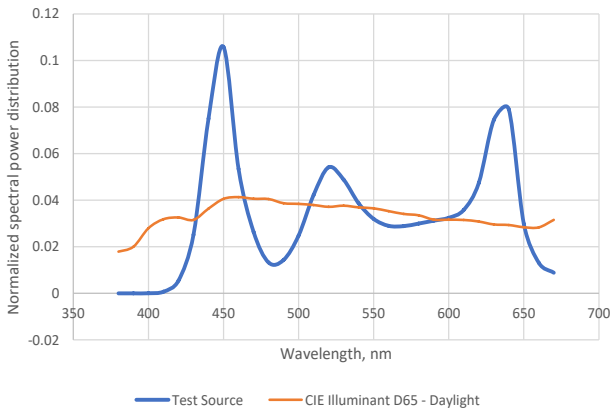
Spectral variance



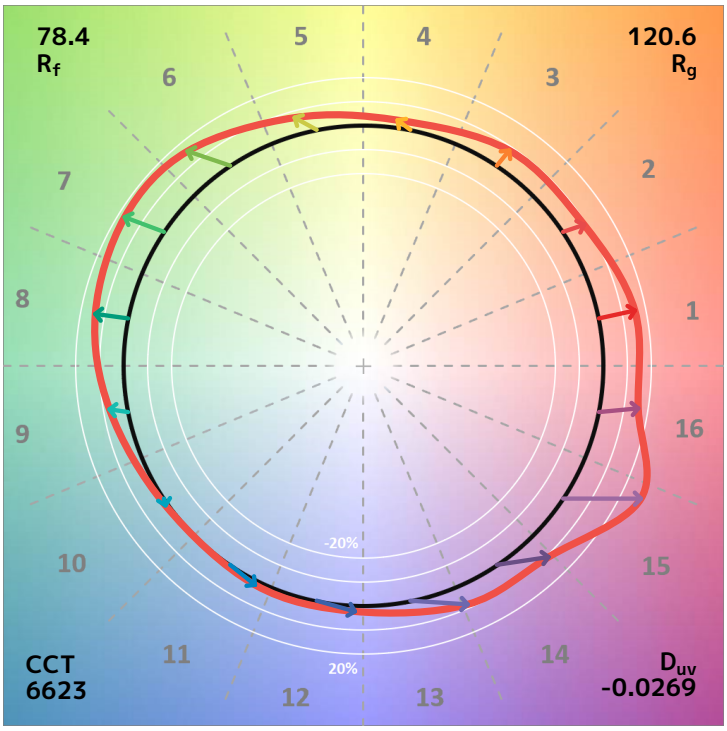
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 42

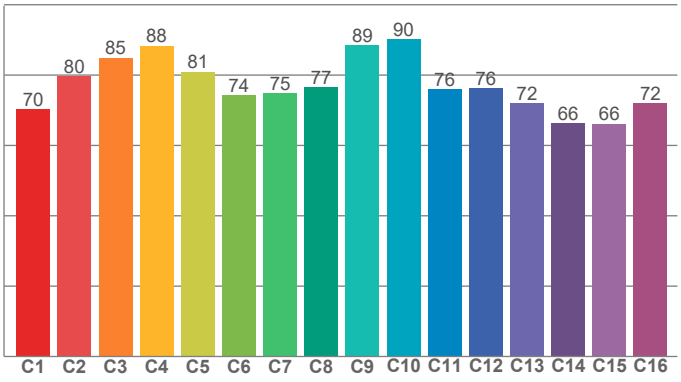
Spectral variance



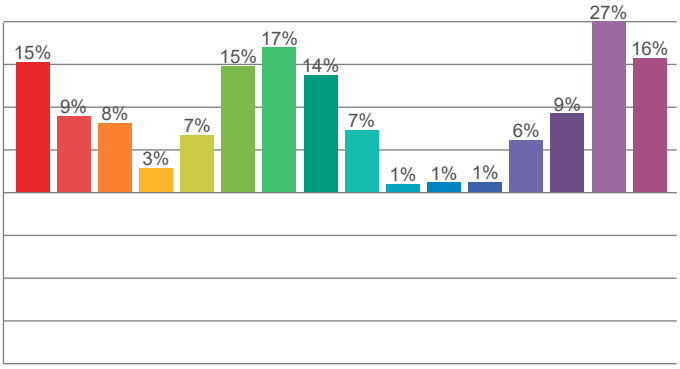
Measurement Date: 8/14/2024



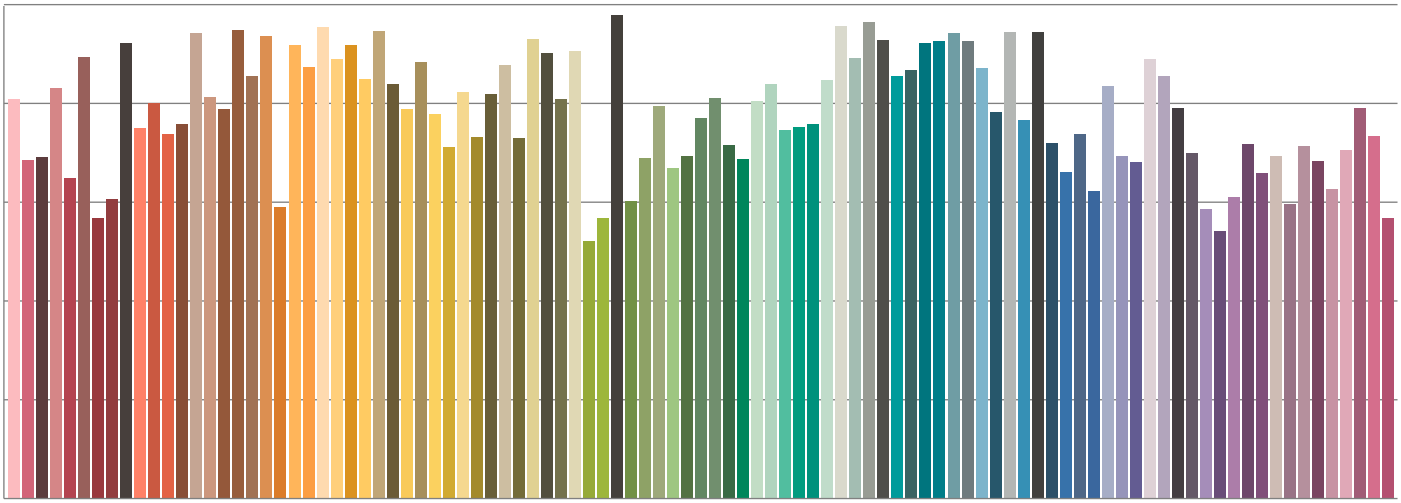
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



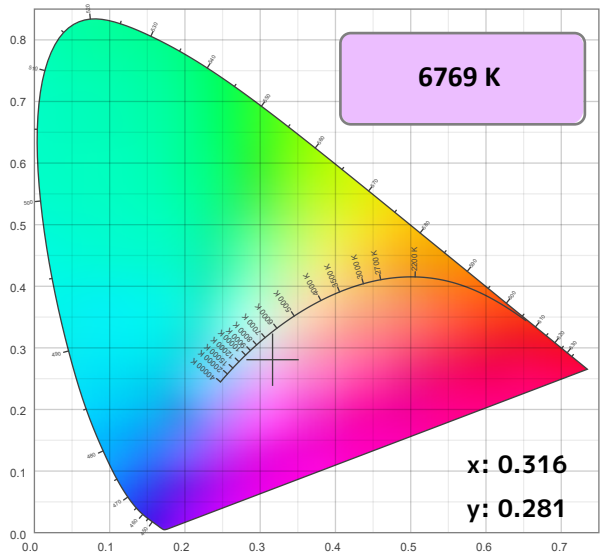
Measurement Date: 8/14/2024

Color Temperature: 6769K

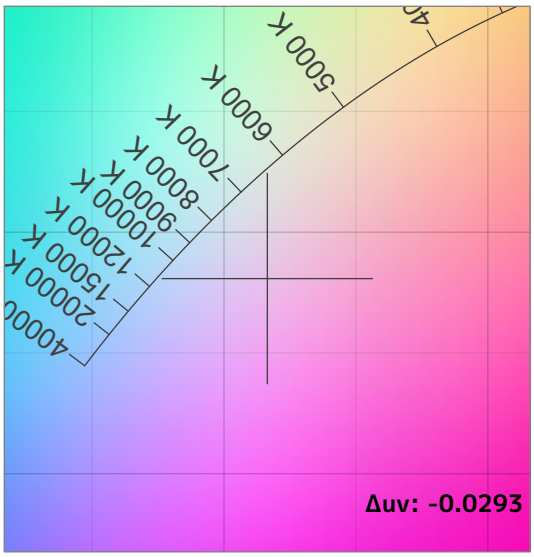
Accuracy Metric Overview

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
65.3	-52.1	76.8	122.2	71	85.6	0.316	0.281	-0.0293	13	51

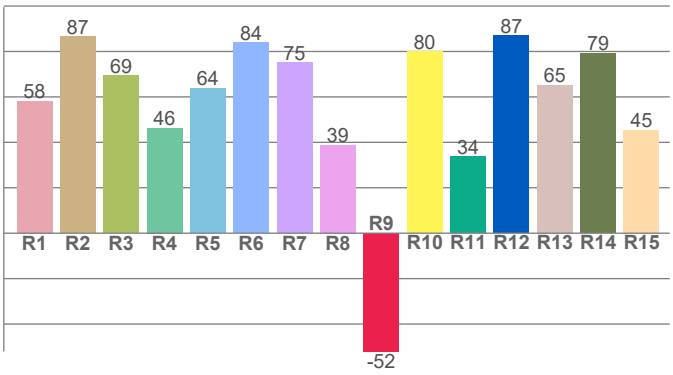
CIE 1931



CIE 1931 ZOOMED

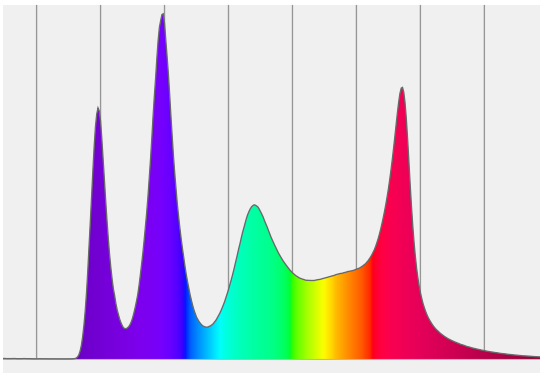


CRI: 65.3 (R1-R8)



Spectral Power Distribution (SPD)

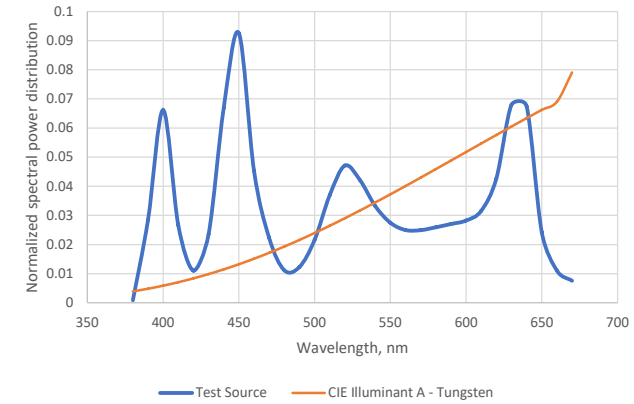
Dominant Wavelength 360 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 13

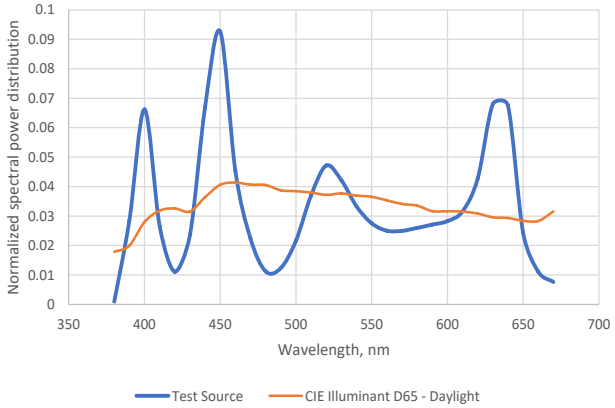
Spectral variance



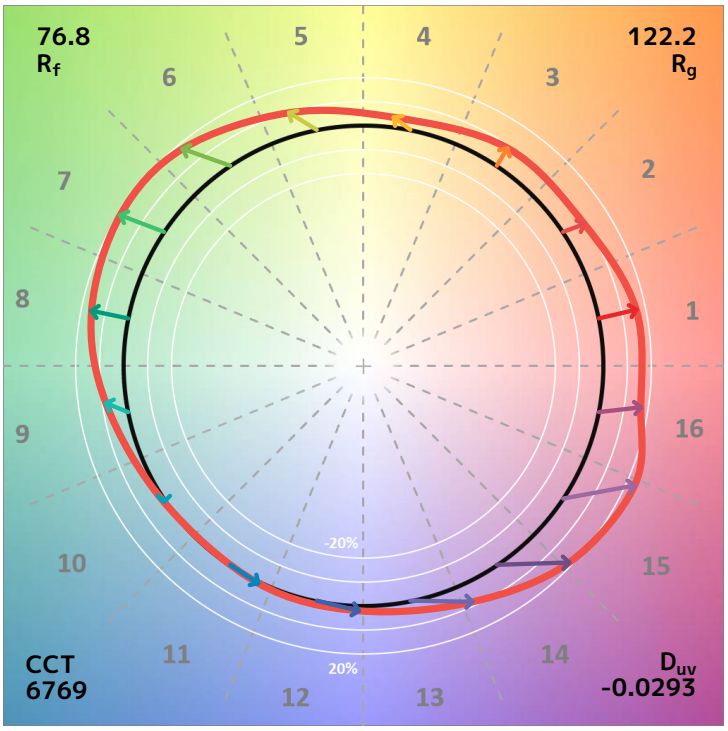
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 51

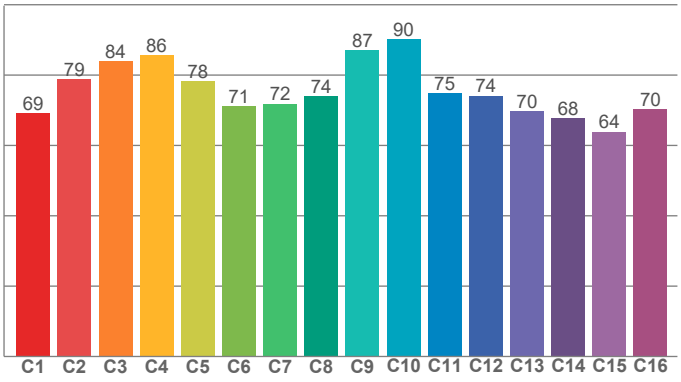
Spectral variance



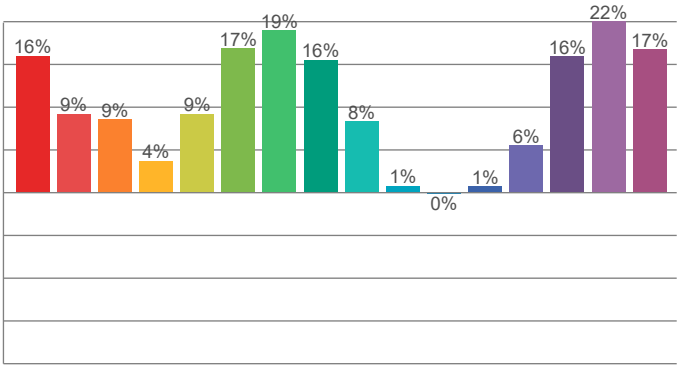
Measurement Date: 8/14/2024



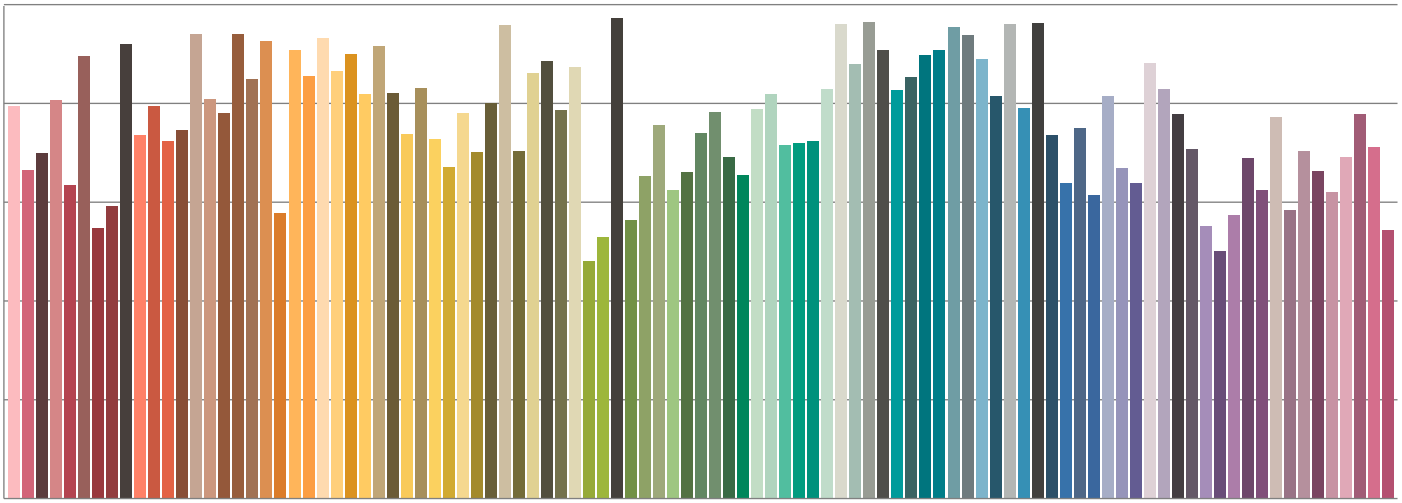
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



Measurement Date: 8/14/2024

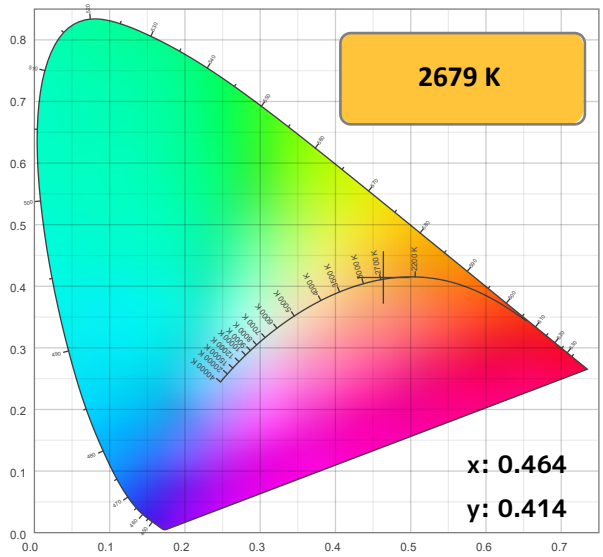
Prepared For ELATION PROFESSIONAL

Color Temperature: 2679K

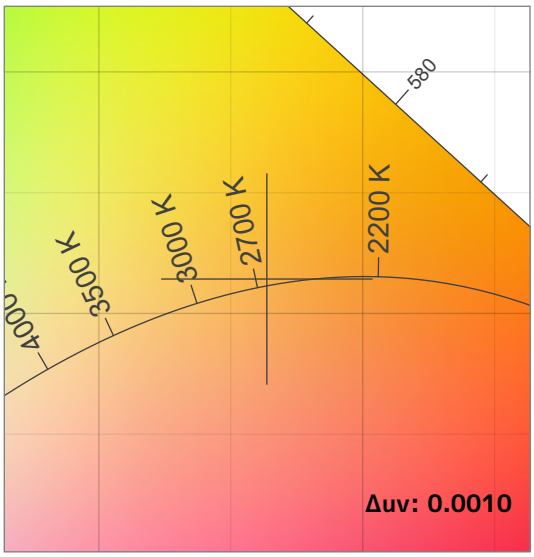
Accuracy Metric Overview

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
88.2	74.3	89.8	107.4	75	88.1	0.464	0.414	0.0010	61	14

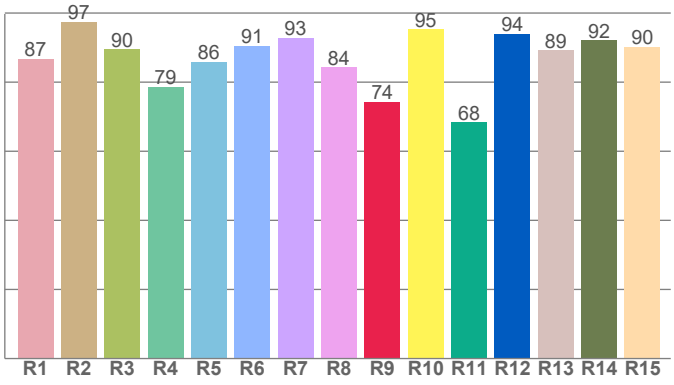
CIE 1931



CIE 1931 ZOOMED

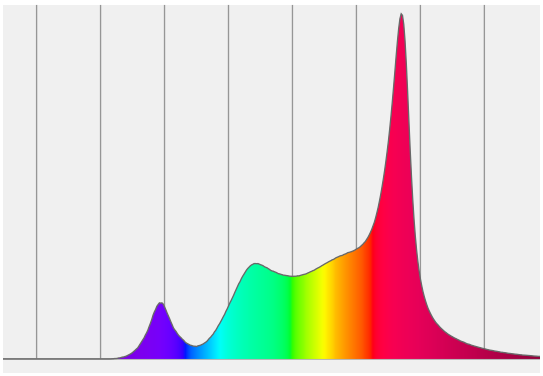


CRI: 88.2 (R1-R8)



Spectral Power Distribution (SPD)

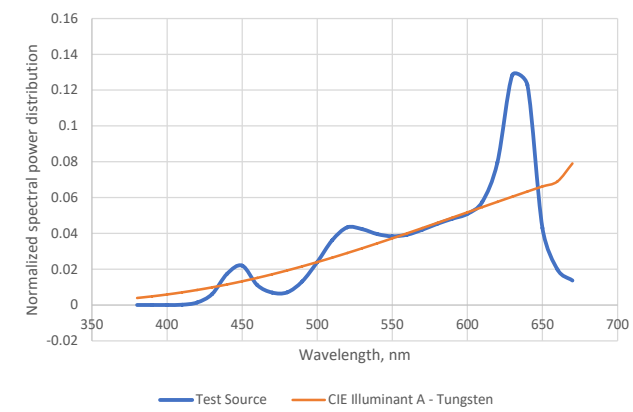
Dominant Wavelength 584 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 61

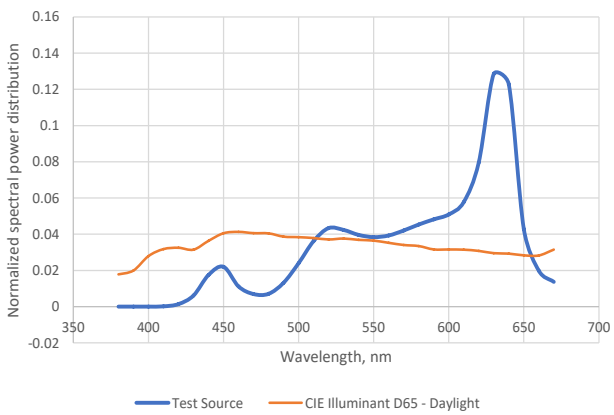
Spectral variance



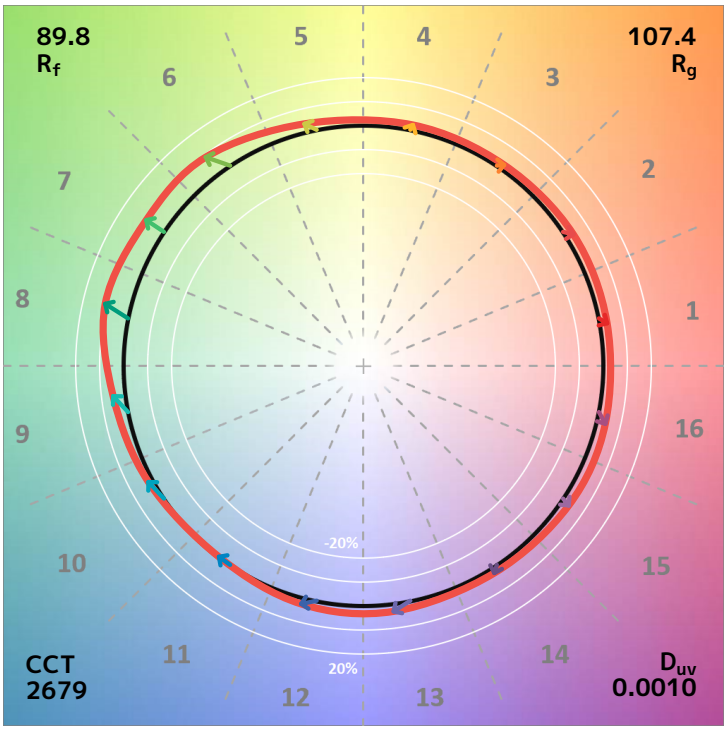
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 14

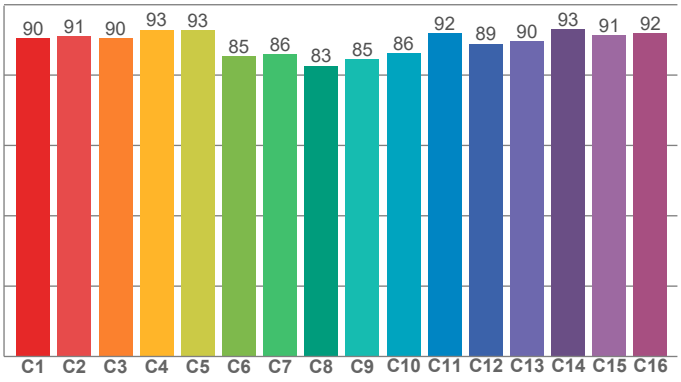
Spectral variance



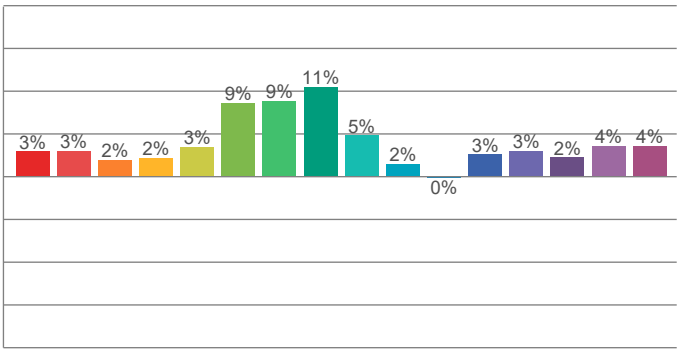
Measurement Date: 8/14/2024



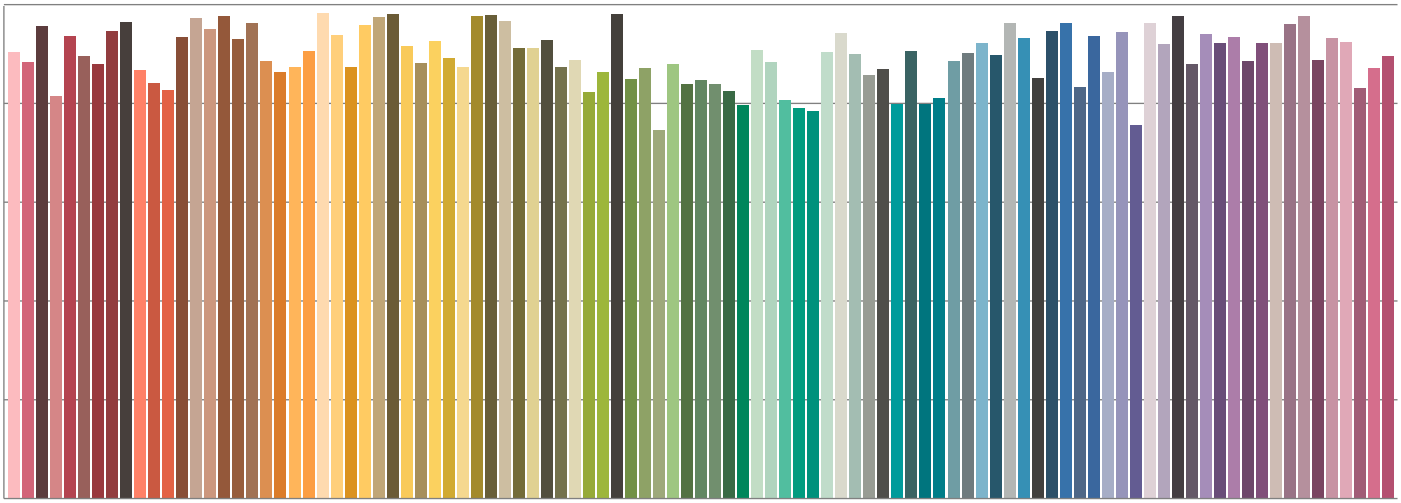
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



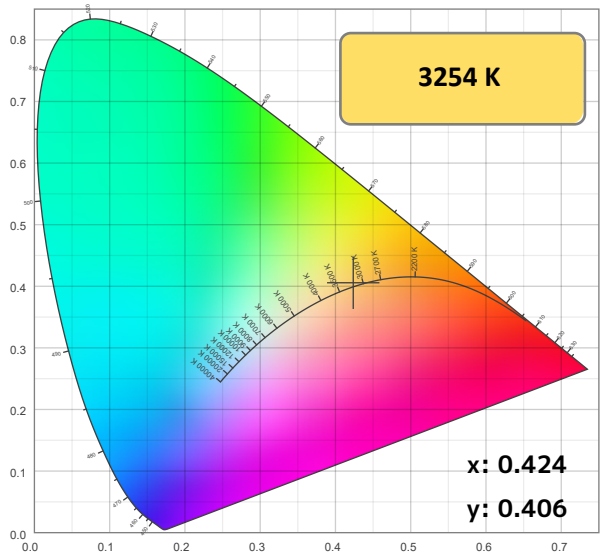
Measurement Date: 8/14/2024

Color Temperature: 3254K

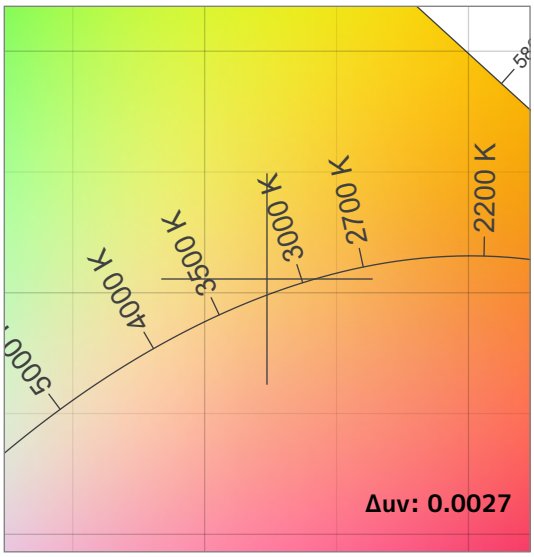
Accuracy Metric Overview

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
90.1	78.0	91.1	107.4	78	90.4	0.424	0.406	0.0027	62	30

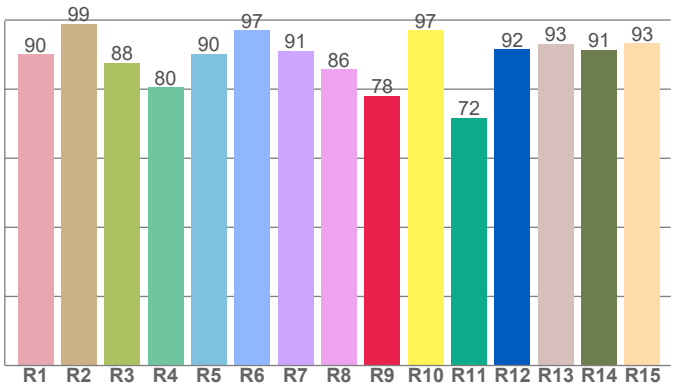
CIE 1931



CIE 1931 ZOOMED

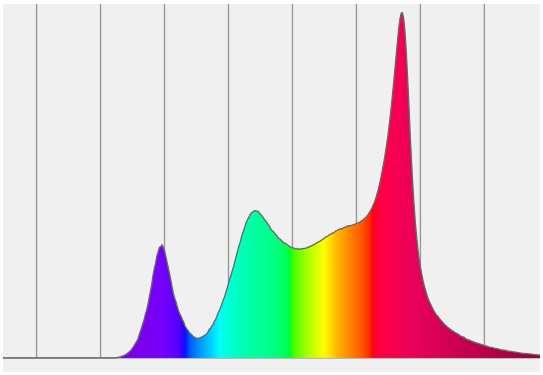


CRI: 90.1 (R1-R8)



Spectral Power Distribution (SPD)

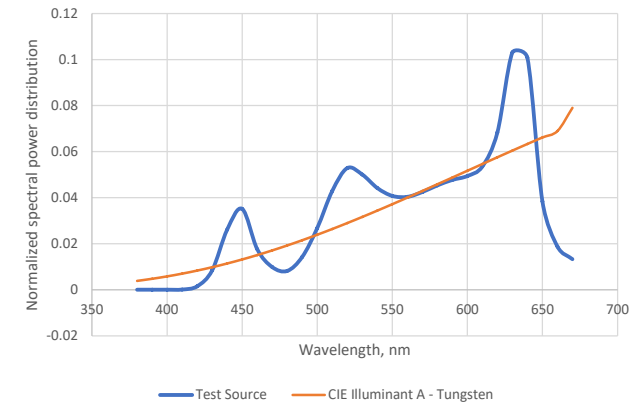
Dominant Wavelength 582 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 62

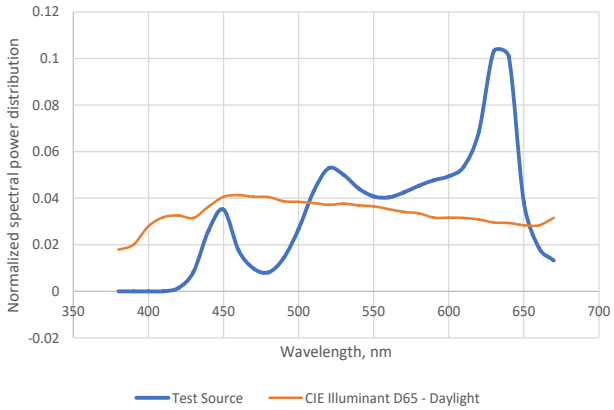
Spectral variance



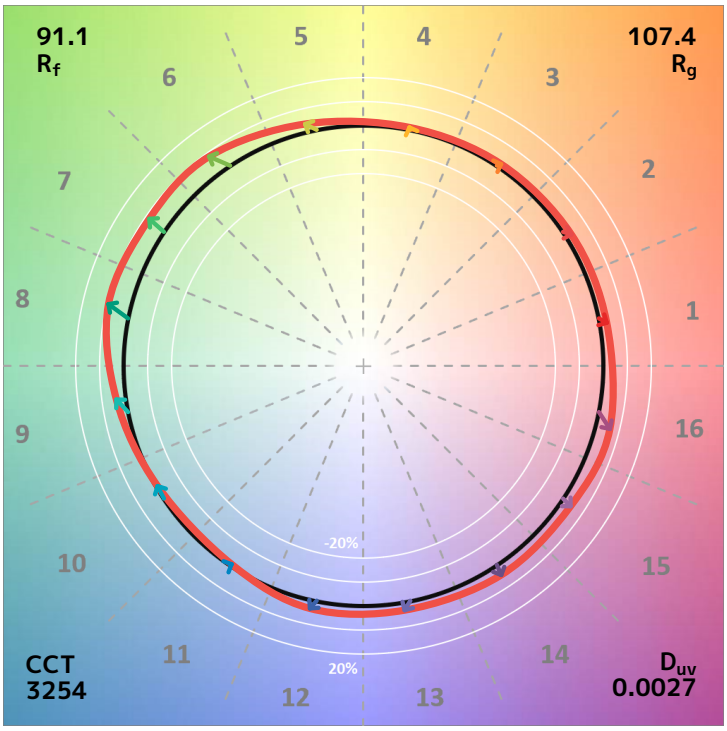
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 30

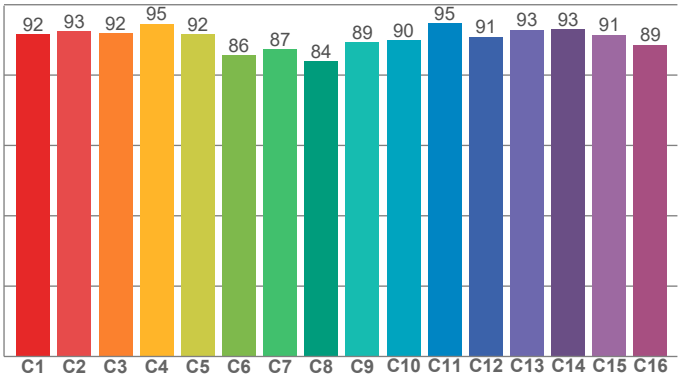
Spectral variance



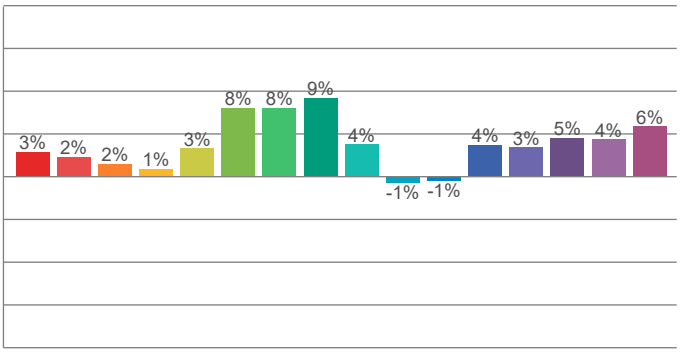
Measurement Date: 8/14/2024



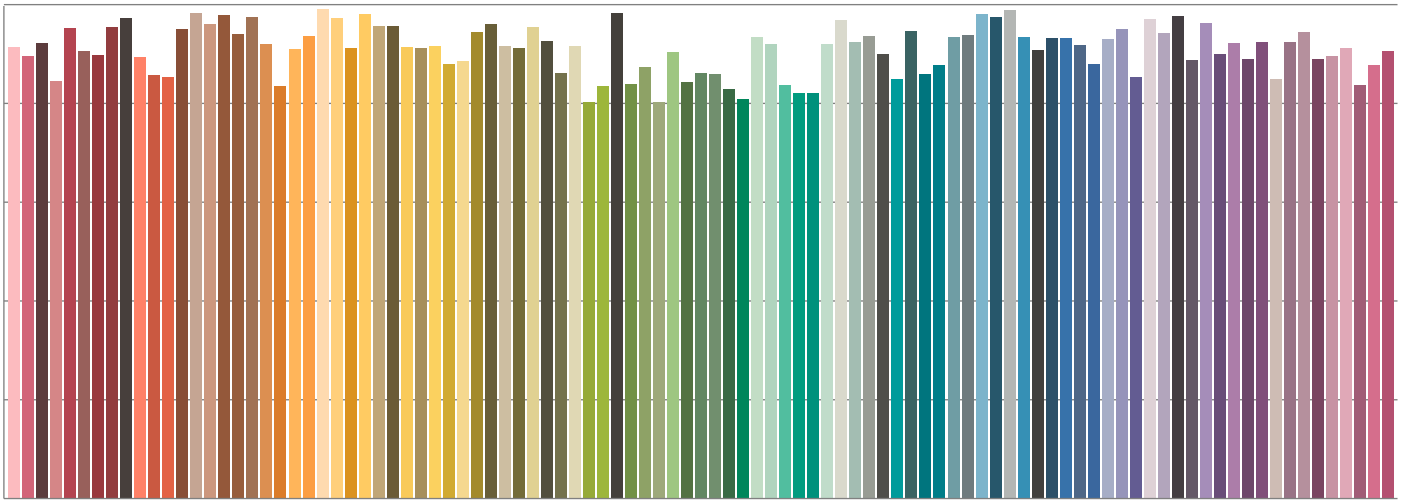
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



Measurement Date: 8/14/2024

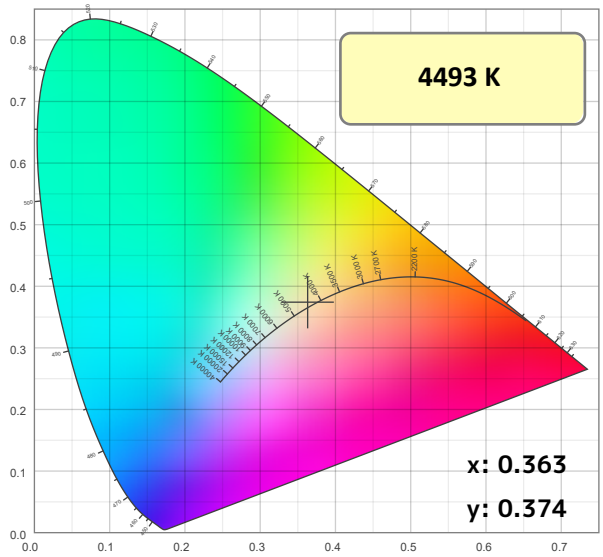
Prepared For ELATION PROFESSIONAL

Color Temperature: 4493K

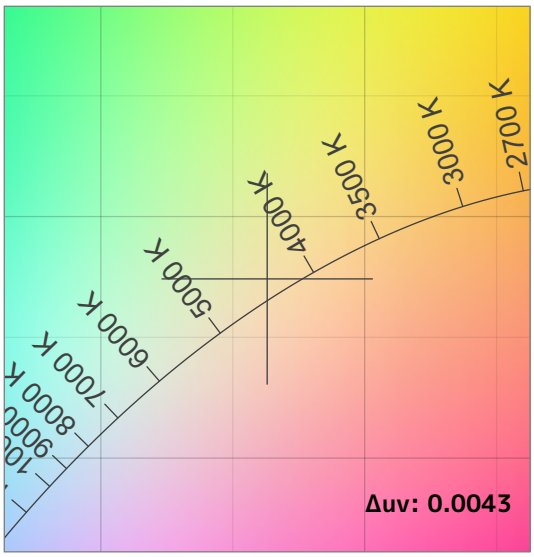
Accuracy Metric Overview

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
90.9	91.2	90.5	107.3	80	92.6	0.363	0.374	0.0043	46	49

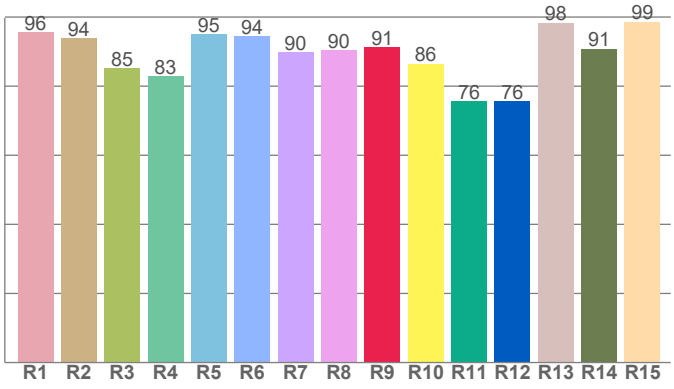
CIE 1931



CIE 1931 ZOOMED

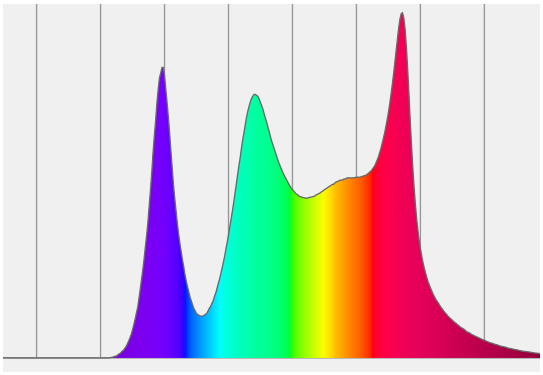


CRI: 90.9 (R1-R8)



Spectral Power Distribution (SPD)

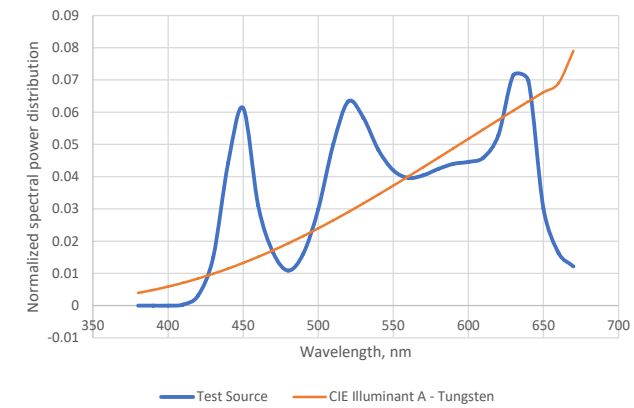
Dominant Wavelength 578 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 46

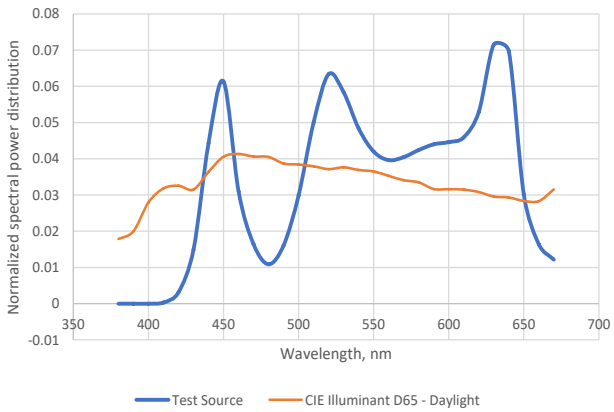
Spectral variance



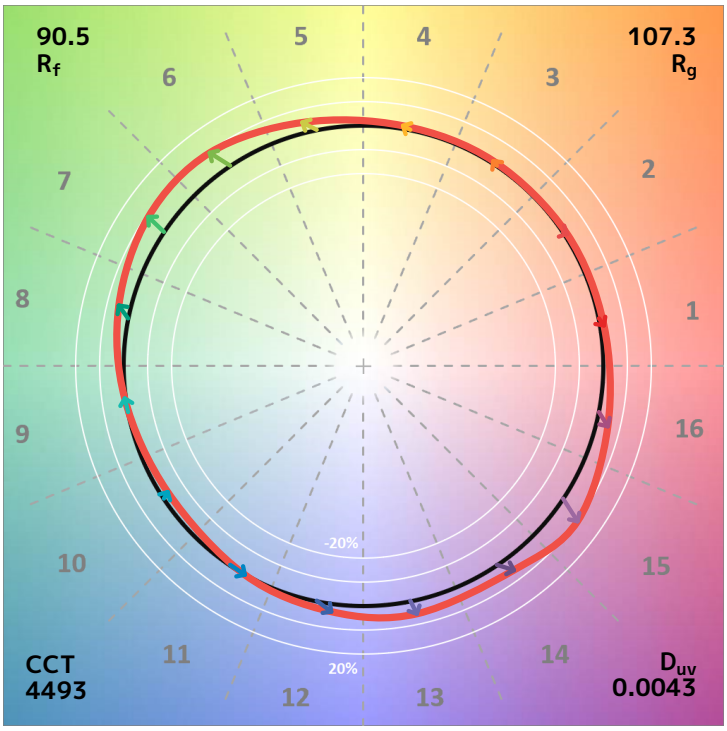
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 49

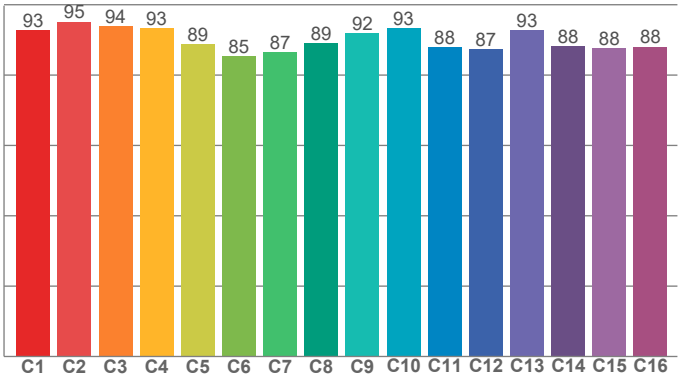
Spectral variance



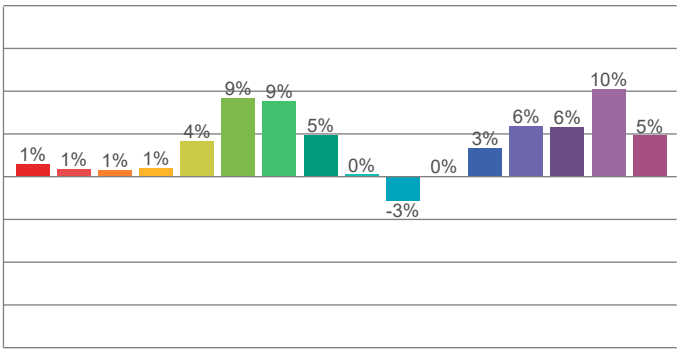
Measurement Date: 8/14/2024



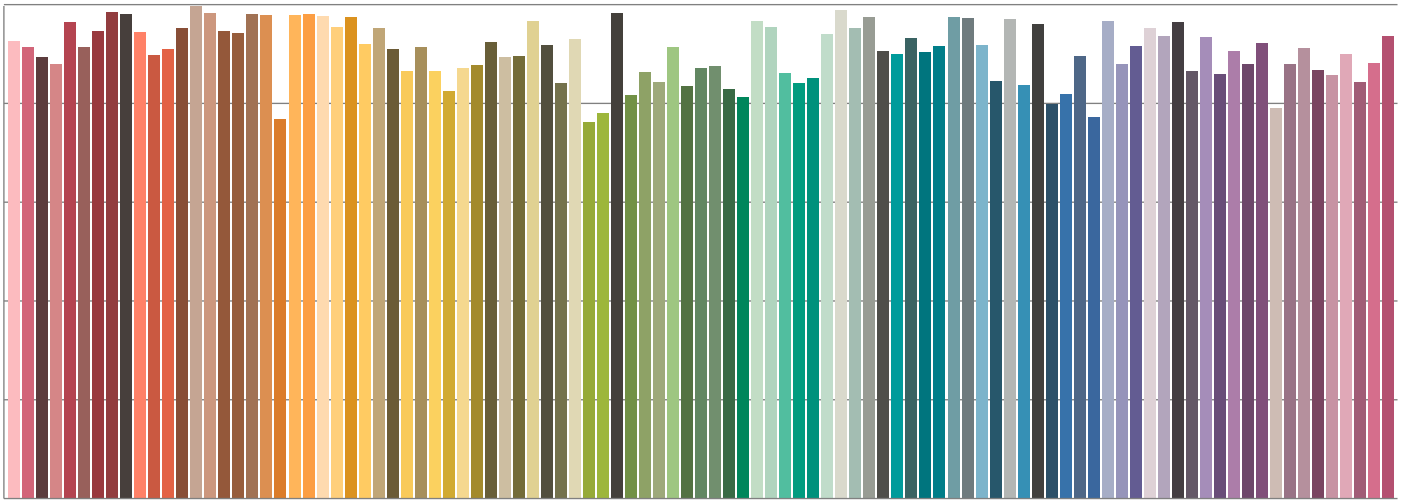
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



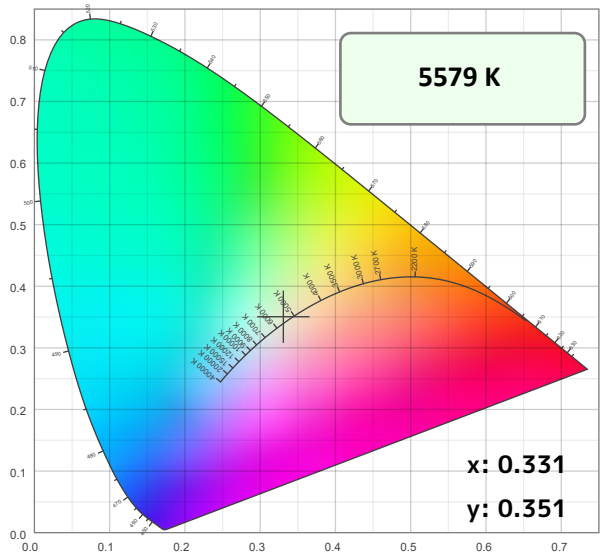
Measurement Date: 8/14/2024

Color Temperature: 5579K

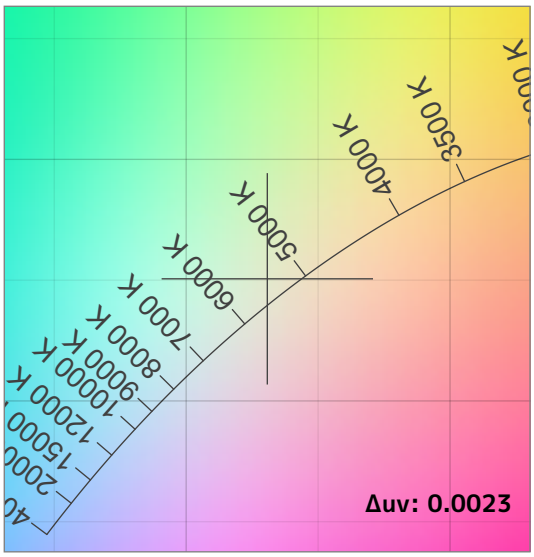
Accuracy Metric Overview

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
89.7	98.4	89.2	107.0	82	91.8	0.331	0.351	0.0023	31	54

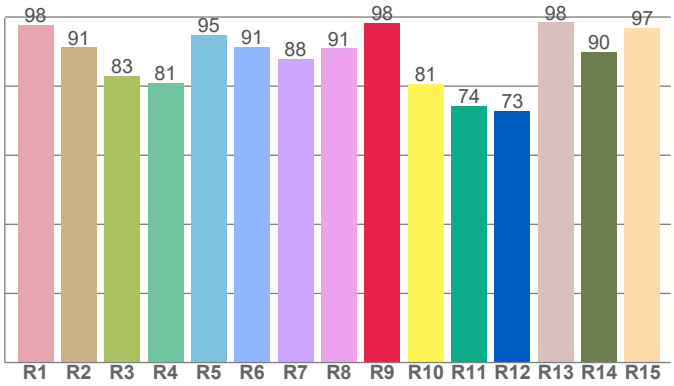
CIE 1931



CIE 1931 ZOOMED

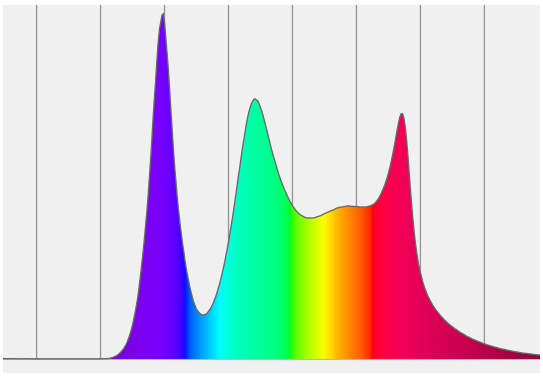


CRI: 89.7 (R1-R8)



Spectral Power Distribution (SPD)

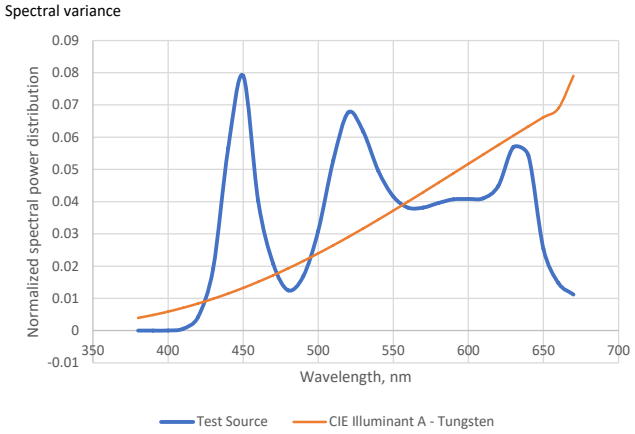
Dominant Wavelength 575 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 31

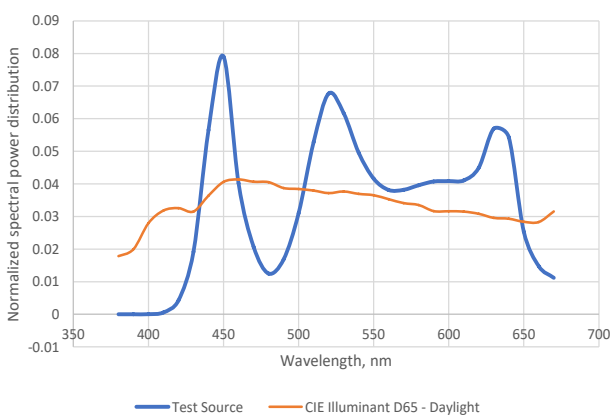
Spectral variance



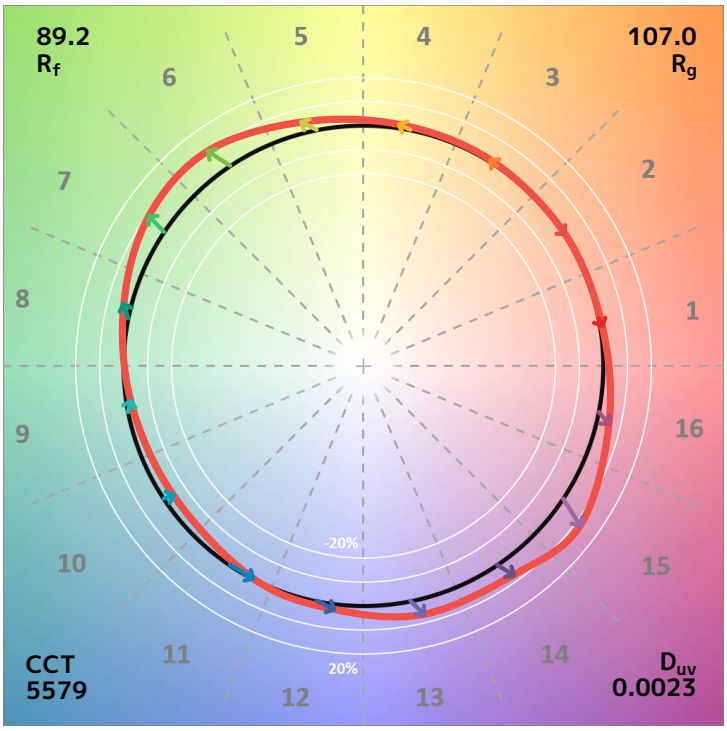
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 54

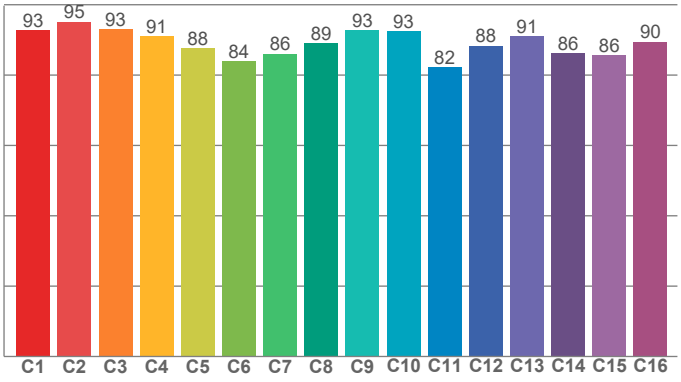
Spectral variance



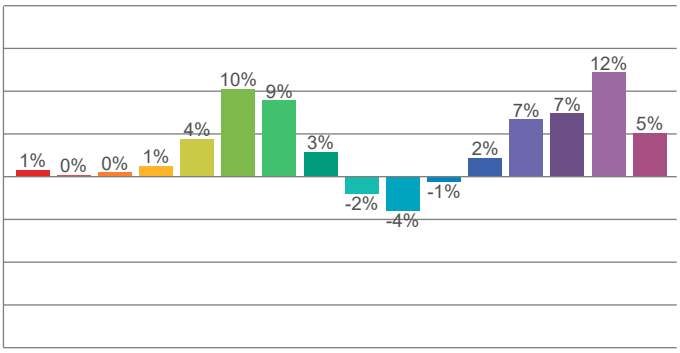
Measurement Date: 8/14/2024



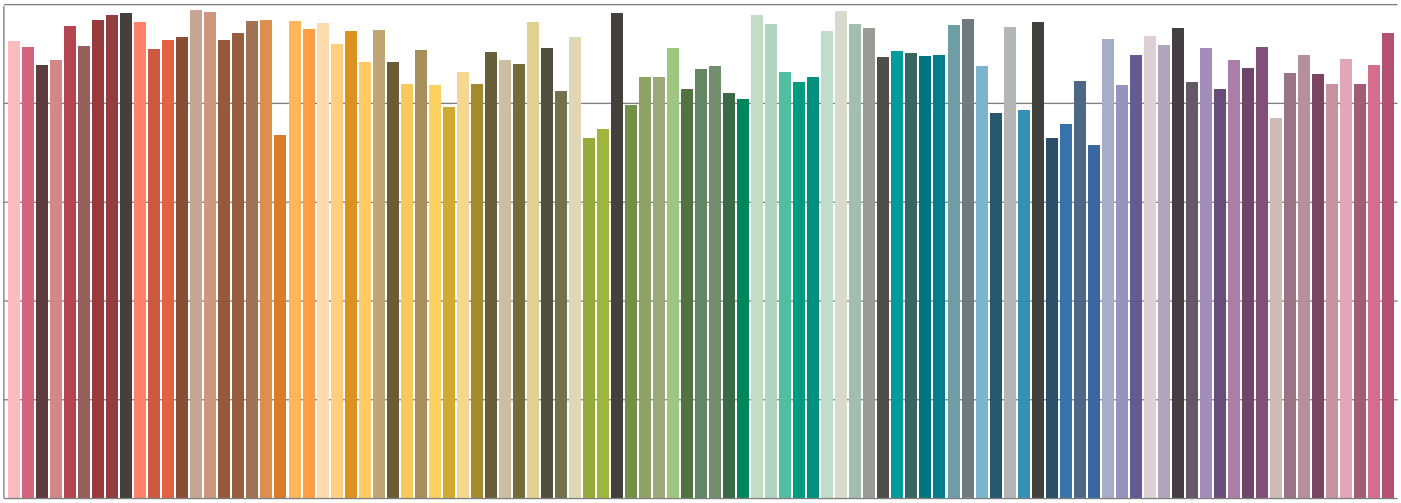
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



Measurement Date: 8/14/2024

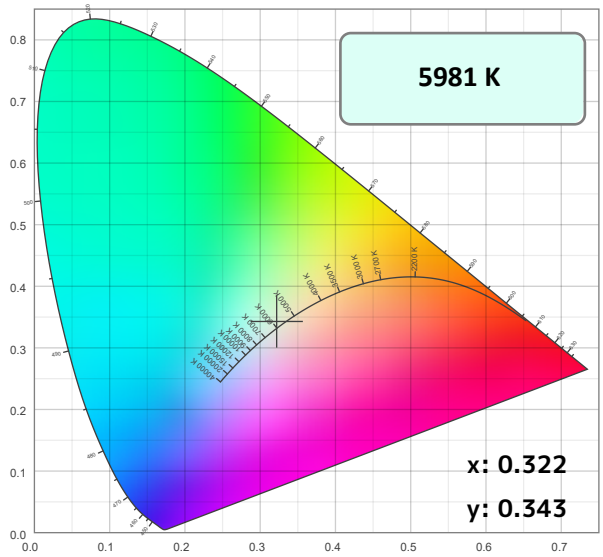
Prepared For ELATION PROFESSIONAL

Color Temperature: 5981K

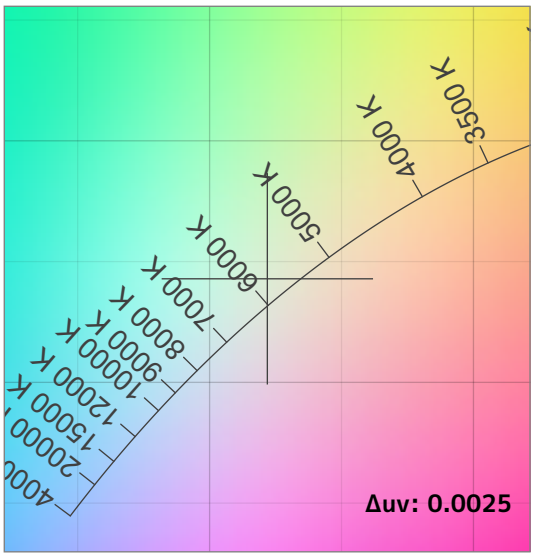
Accuracy Metric Overview

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
89.5	96.0	88.9	106.7	83	91.7	0.322	0.343	0.0025	26	54

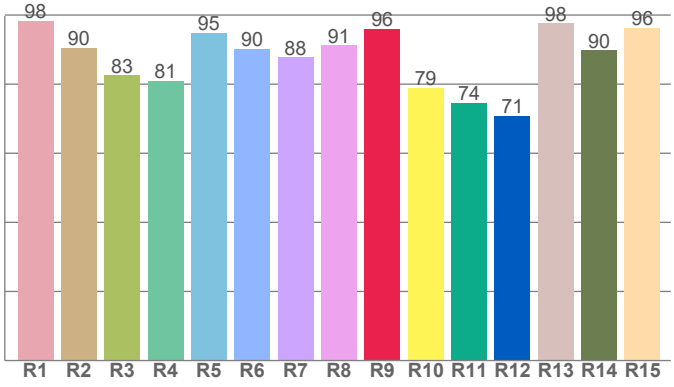
CIE 1931



CIE 1931 ZOOMED

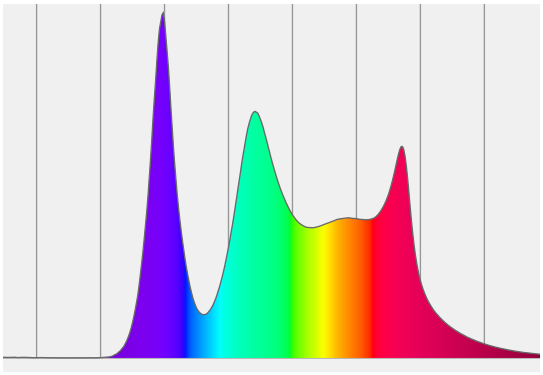


CRI: 89.5 (R1-R8)



Spectral Power Distribution (SPD)

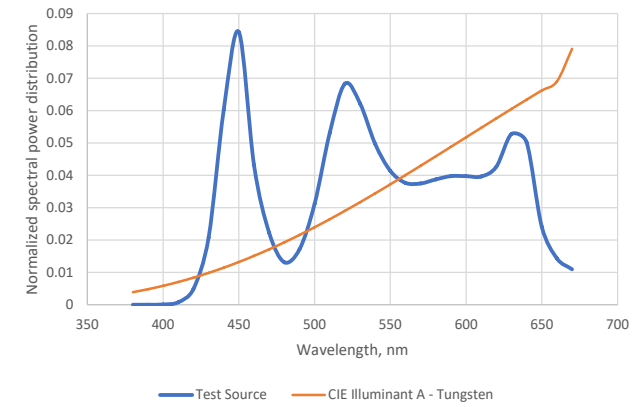
Dominant Wavelength 572 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 26

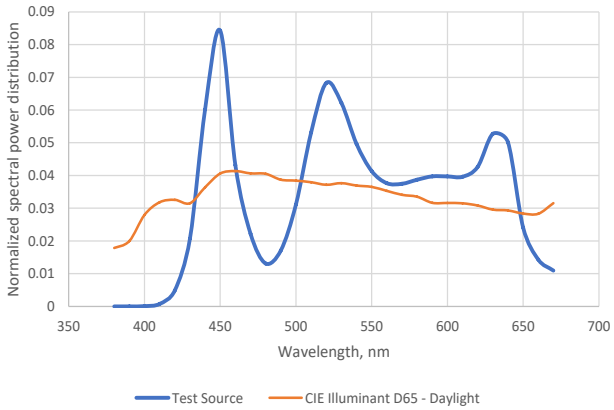
Spectral variance



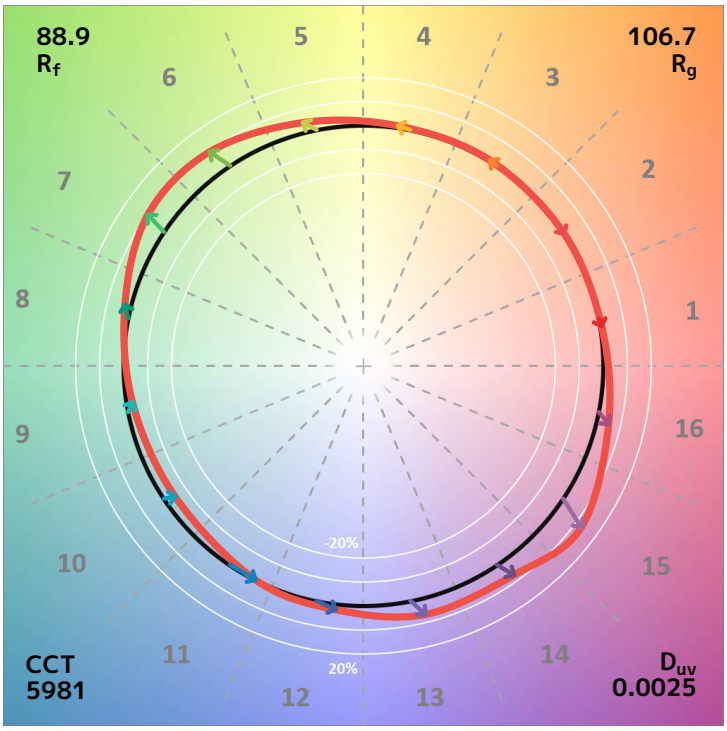
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 54

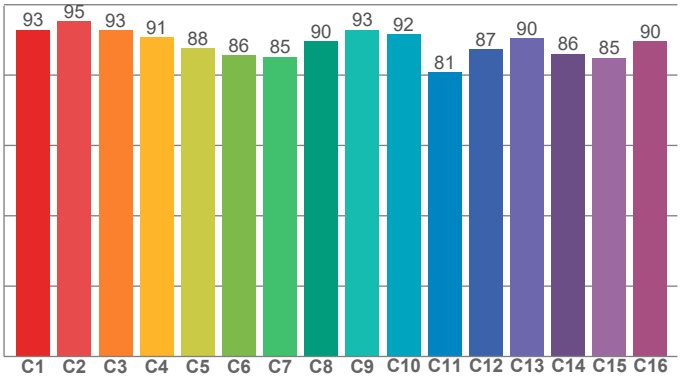
Spectral variance



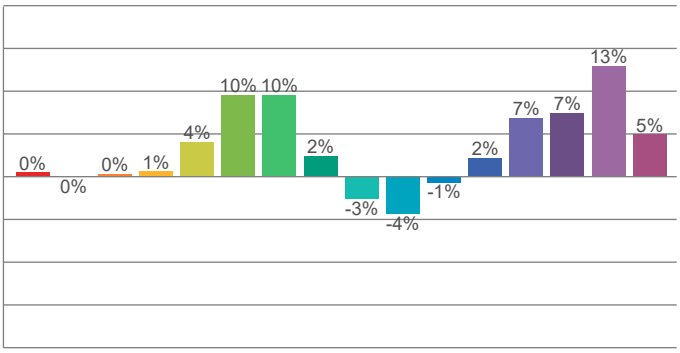
Measurement Date: 8/14/2024



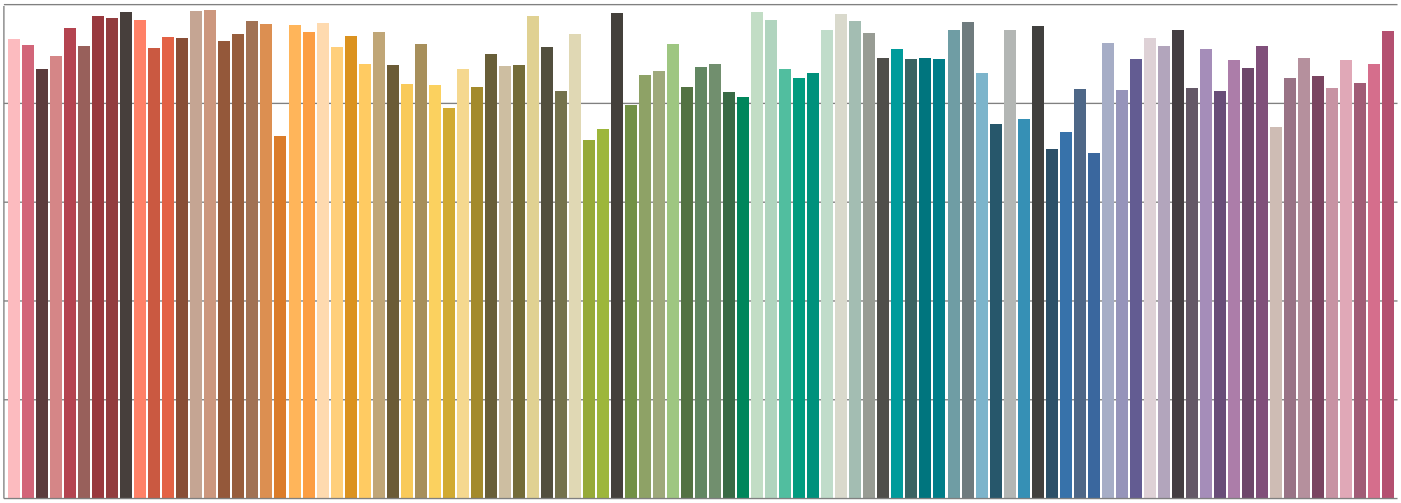
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



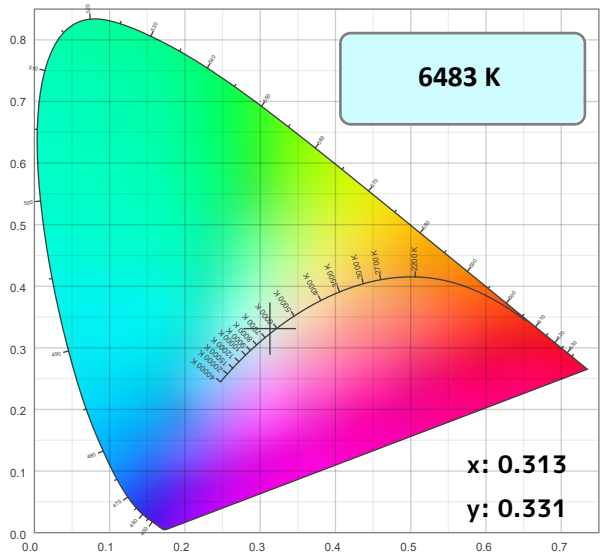
Measurement Date: 8/14/2024

Color Temperature: 6483K

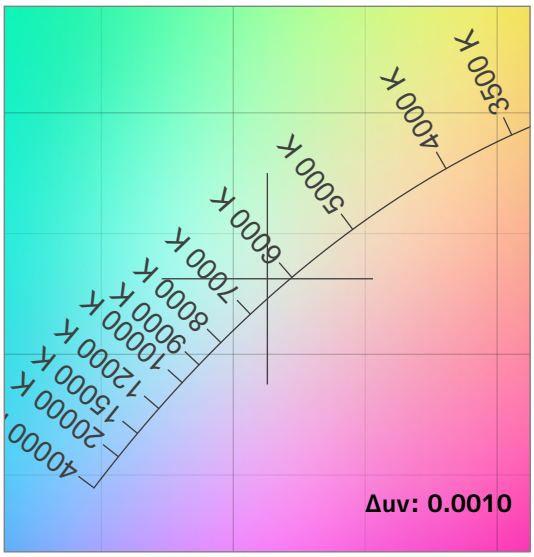
Accuracy Metric Overview

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
89.3	97.4	88.5	106.6	85	91.5	0.313	0.331	0.0010	21	54

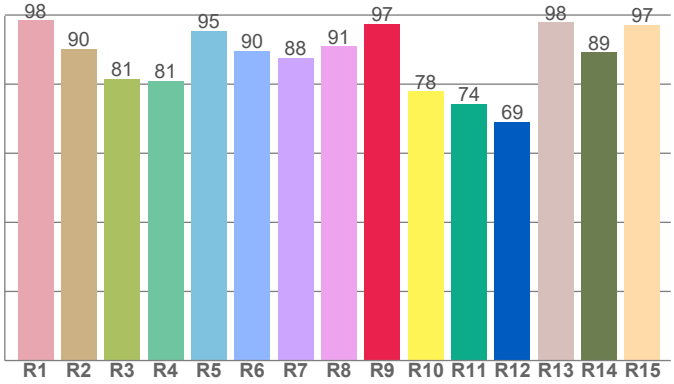
CIE 1931



CIE 1931 ZOOMED

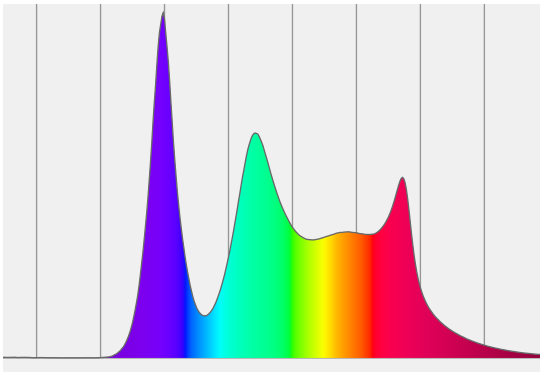


CRI: 89.3 (R1-R8)



Spectral Power Distribution (SPD)

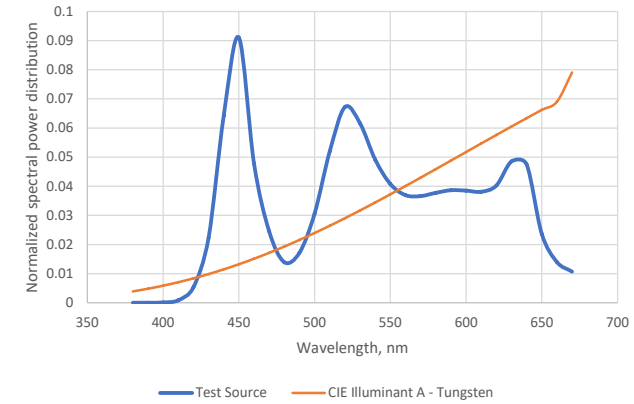
Dominant Wavelength 556 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 21

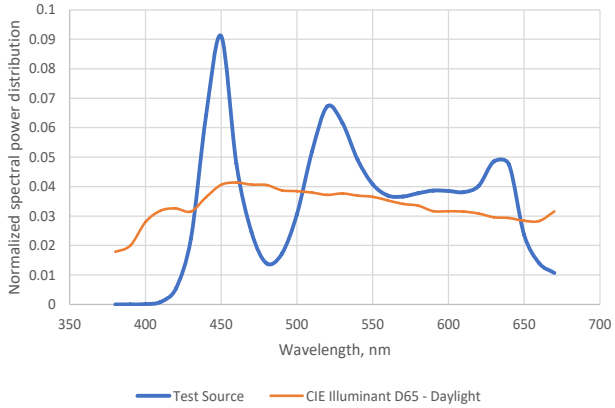
Spectral variance



SSI Spectral Variance Graph- Daylight

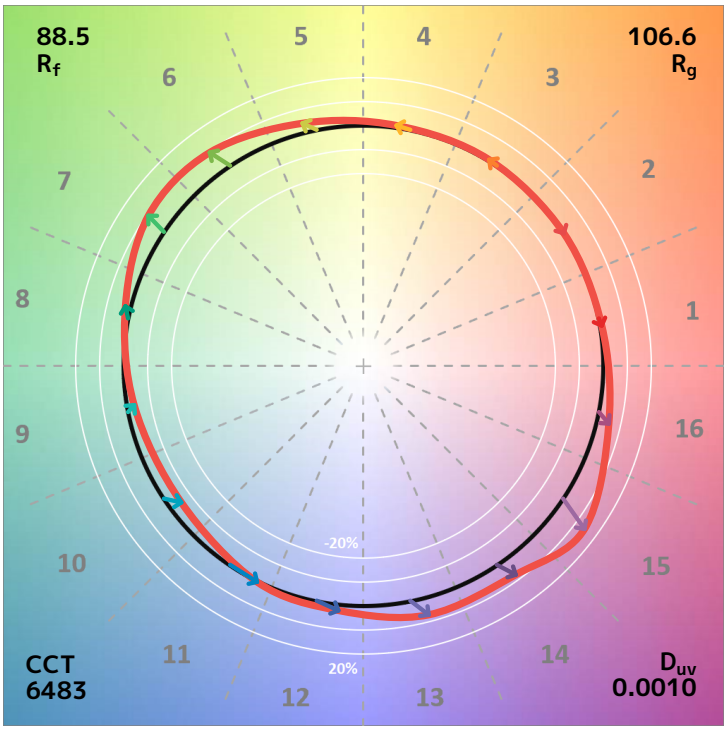
SSI [CIE D65] 54

Spectral variance

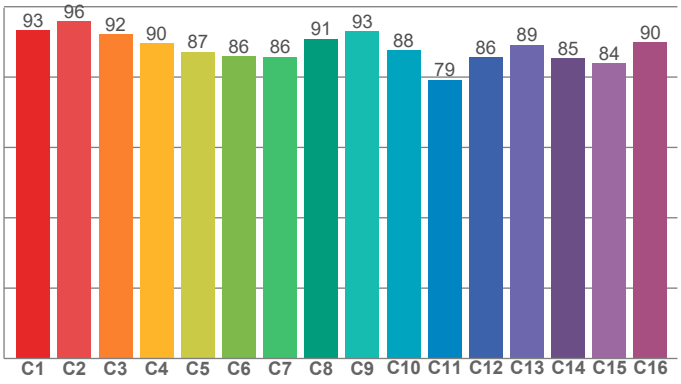


SSI [CIE D65] - Daylight **54**

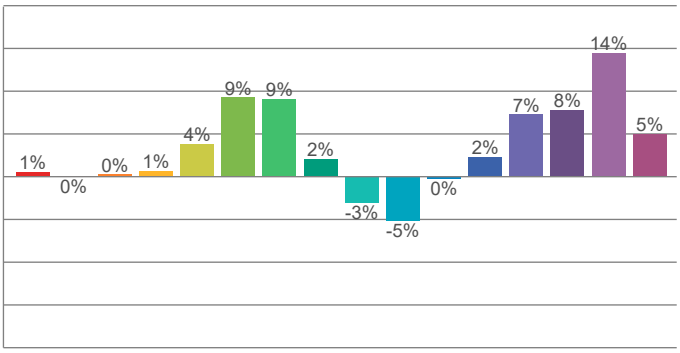
Measurement Date: 8/14/2024



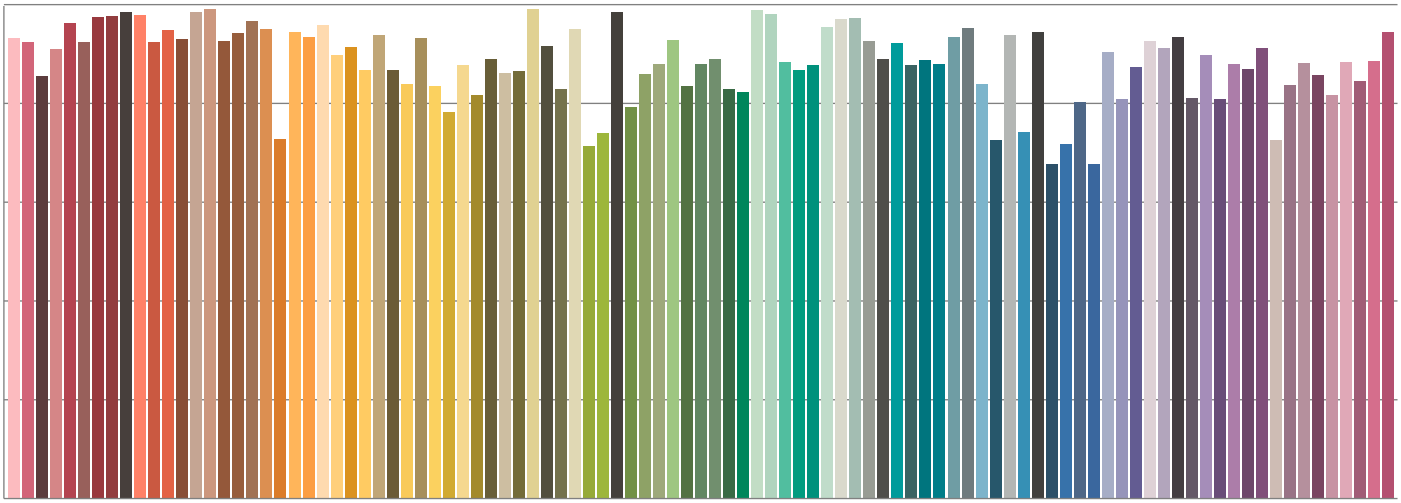
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



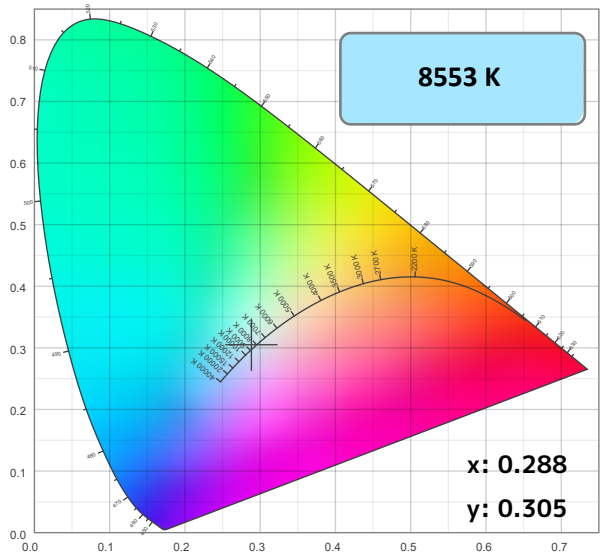
Measurement Date: 8/14/2024

Color Temperature: 8553K

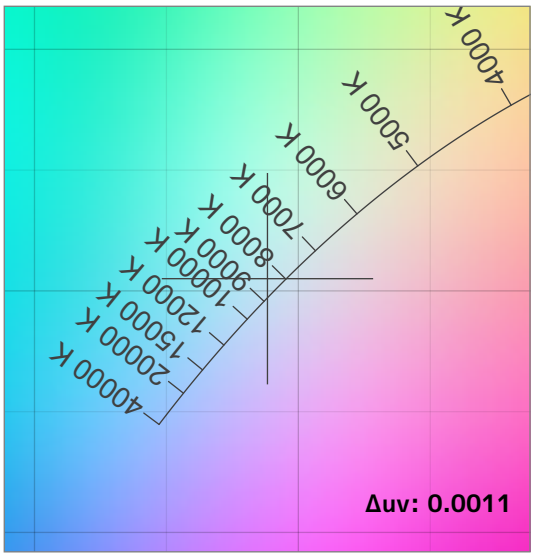
Accuracy Metric Overview

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
88.2	85.4	87.0	104.5	85	90.4	0.288	0.305	0.0011	4	50

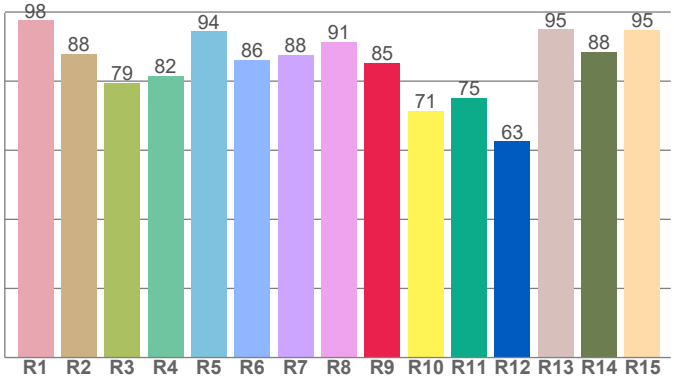
CIE 1931



CIE 1931 ZOOMED

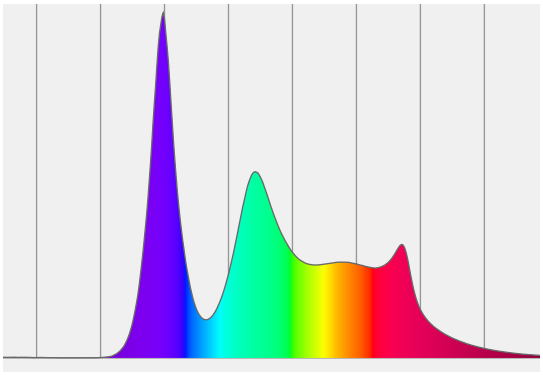


CRI: 88.2 (R1-R8)



Spectral Power Distribution (SPD)

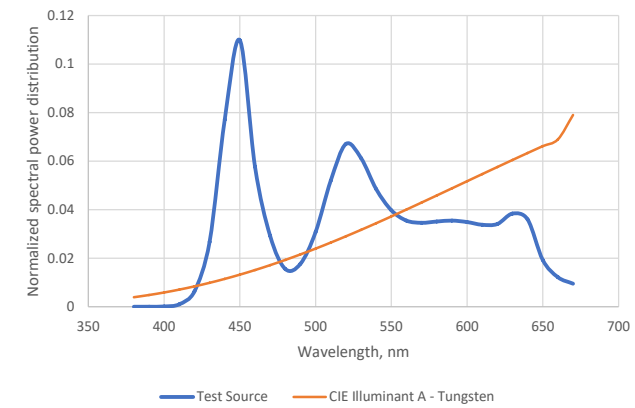
Dominant Wavelength 479 nm



SSI Spectral Variance Graph- Tungsten

SSI [CIE A] 4

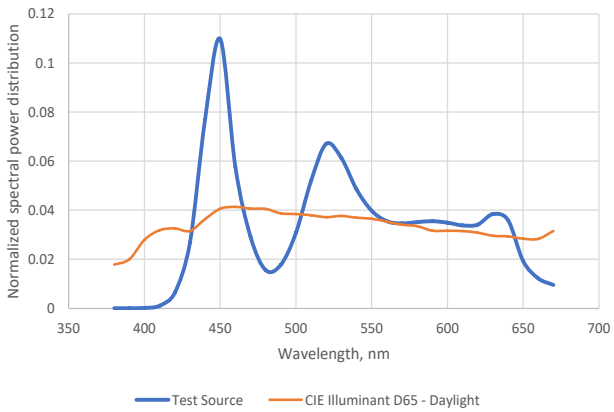
Spectral variance



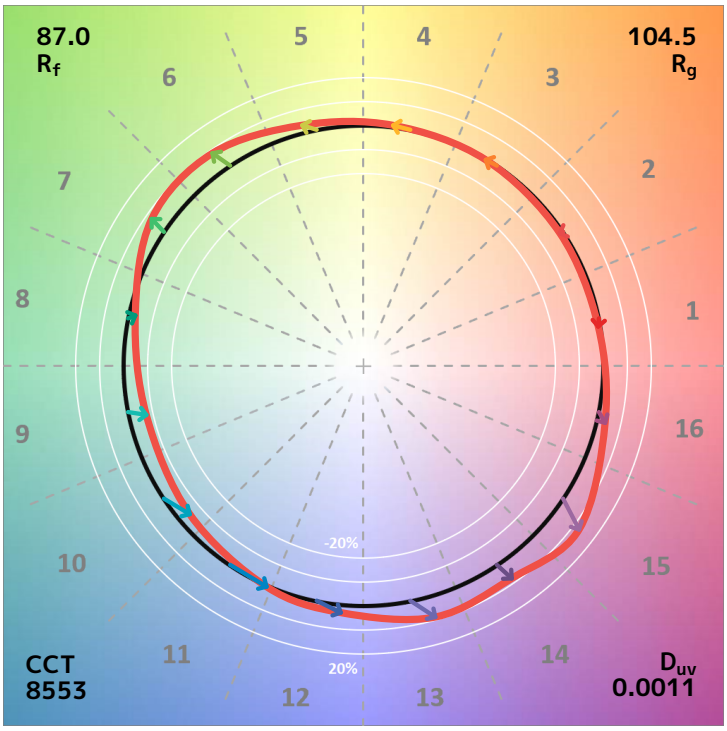
SSI Spectral Variance Graph- Daylight

SSI [CIE D65] 50

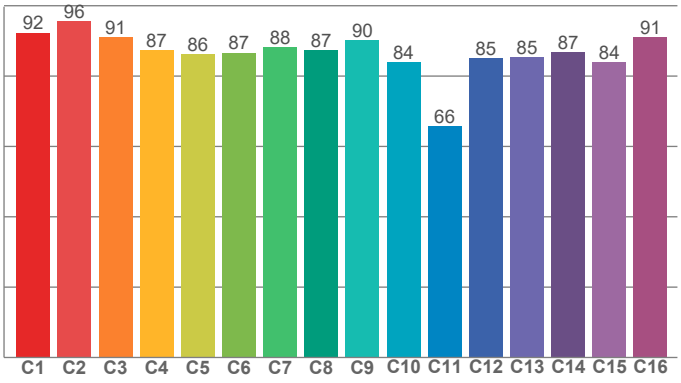
Spectral variance



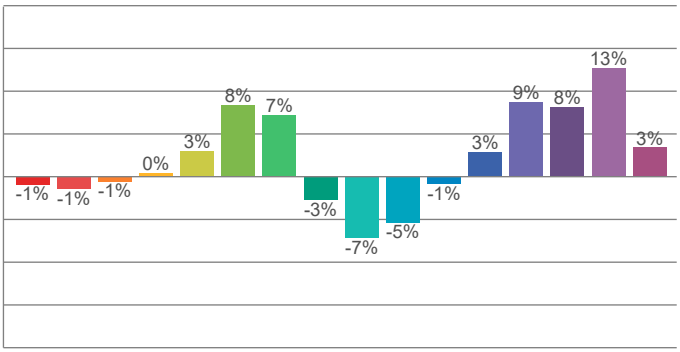
Measurement Date: 8/14/2024



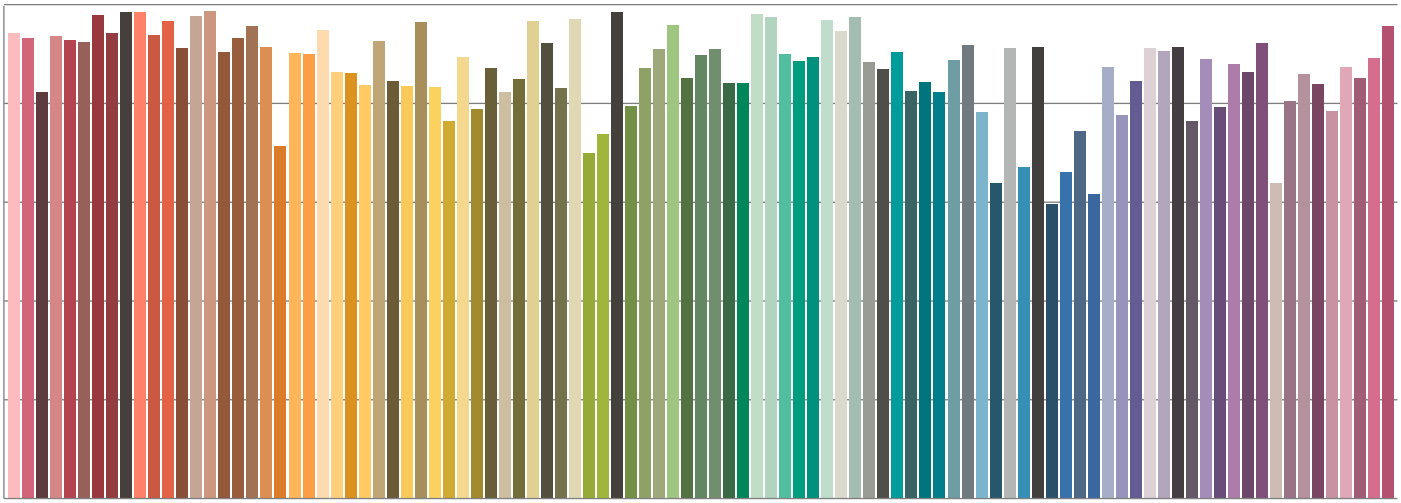
TM30-18 R_f Values per Hue Bin



TM30 Chroma Shift per Hue Bin



TM30-18 R_f Values per Reference Color (CES)



Measurement Date: 8/14/2024

Measurements

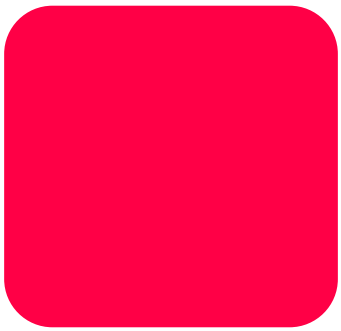
Total Lumen Output: 545 lm

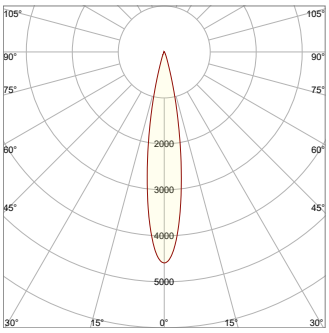
Peak Intensity: 4583 cd

Efficacy: 21 Lumen/Watt

Power: 25.5 W

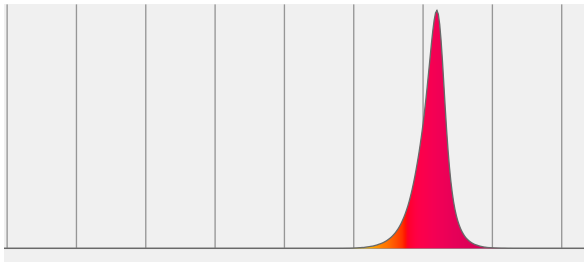
Voltage: 121 V, Current: 0.230 A

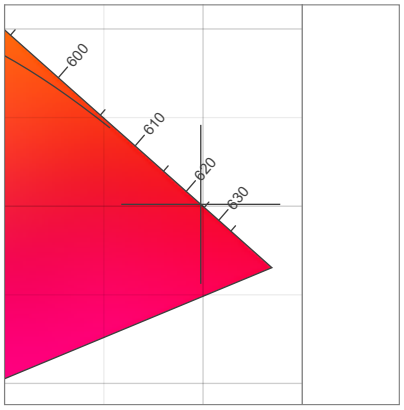




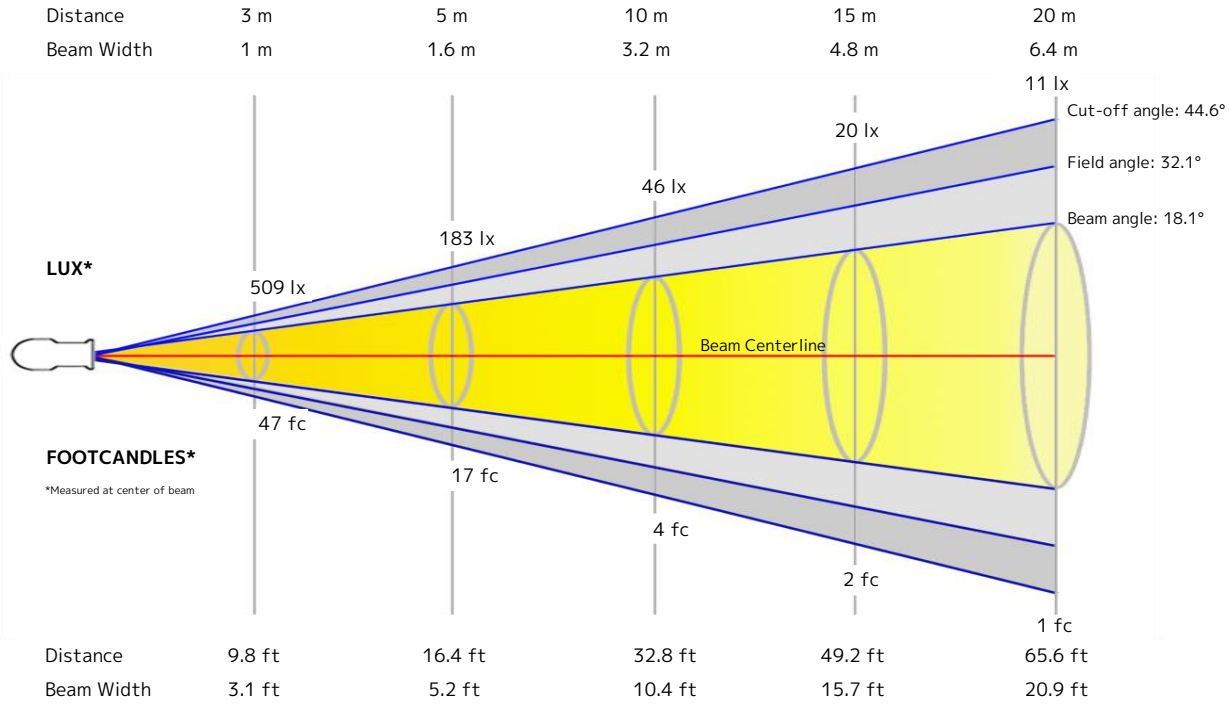
Spectral Power Distribution

Dominant Wavelength 624 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
624	0.699	0.301	0.536	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	4582	1145	509	286	183	127	94	72	57	46	38	32	27	23	20	18	16	14	13	11
FC	425.7	106.4	47.3	26.6	17	11.8	8.7	6.7	5.3	4.3	3.5	3	2.5	2.2	1.9	1.7	1.5	1.3	1.2	1.1

Measurement Date: 8/14/2024

Measurements

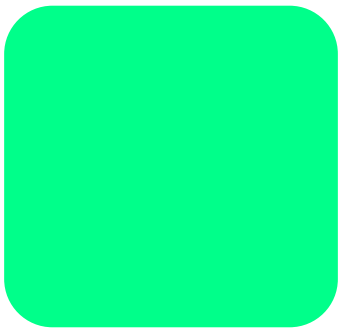
Total Lumen Output: 1135 lm

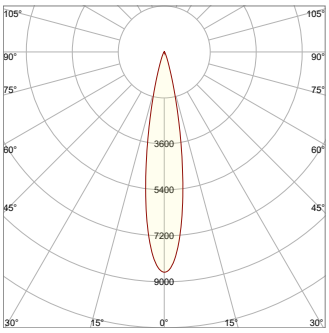
Peak Intensity: 8606 cd

Efficacy: 41 Lumen/Watt

Power: 28.0 W

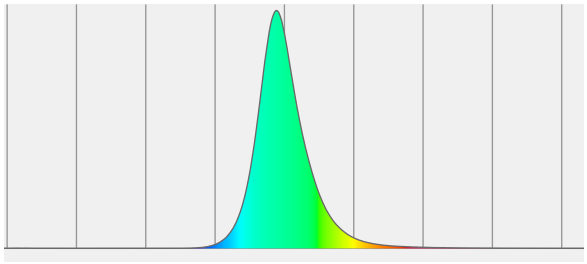
Voltage: 120 V, Current: 0.251 A

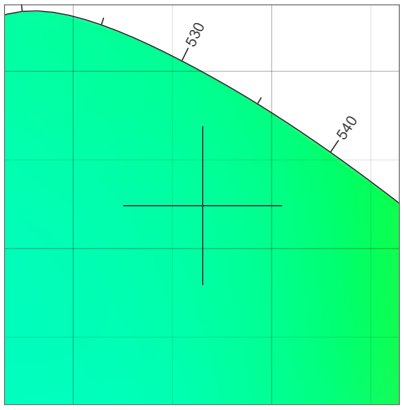




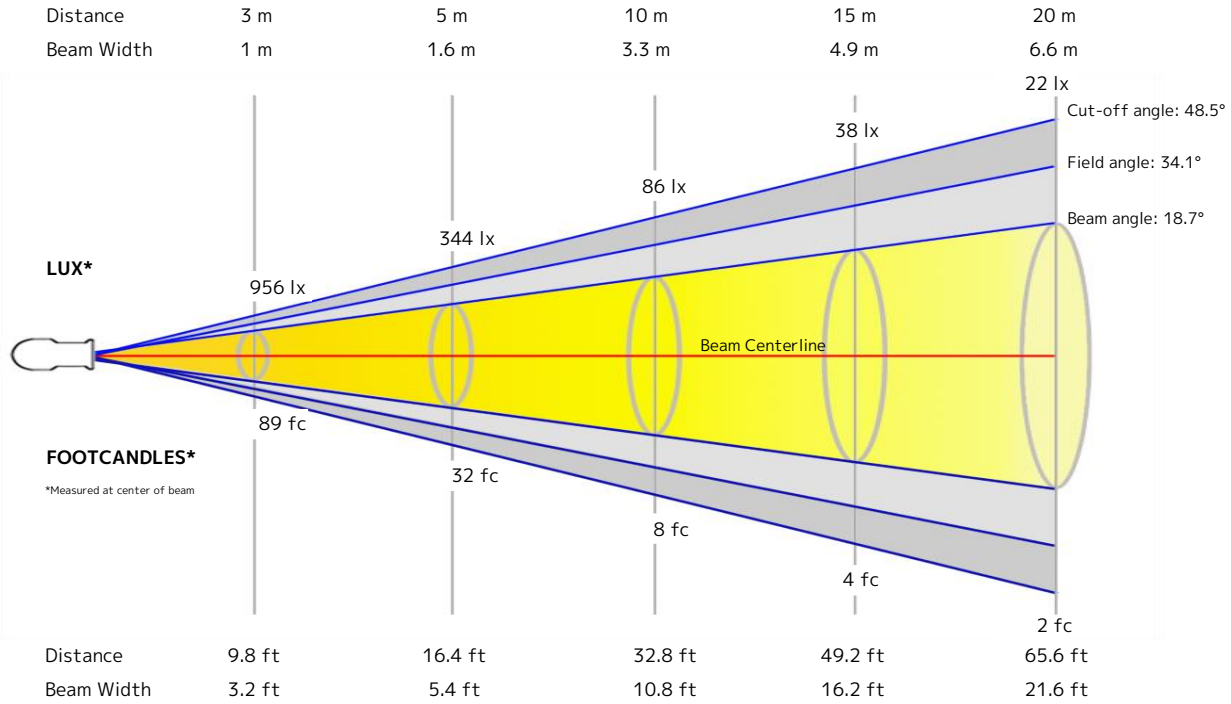
Spectral Power Distribution

Dominant Wavelength 527 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
527	0.165	0.724	0.058	0.383



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	8606	2151	956	538	344	239	176	134	106	86	71	60	51	44	38	34	30	27	24	22
FC	799.5	199.9	88.8	50	32	22.2	16.3	12.5	9.9	8	6.6	5.6	4.7	4.1	3.6	3.1	2.8	2.5	2.2	2

Measurement Date: 8/14/2024

Measurements

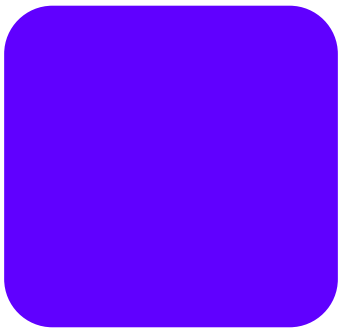
Total Lumen Output: 191 lm

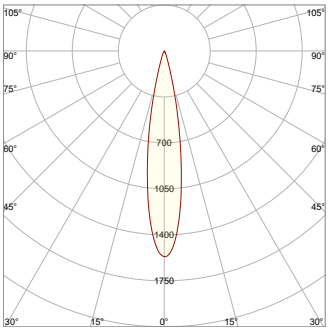
Peak Intensity: 1564 cd

Efficacy: 7 Lumen/Watt

Power: 28.5 W

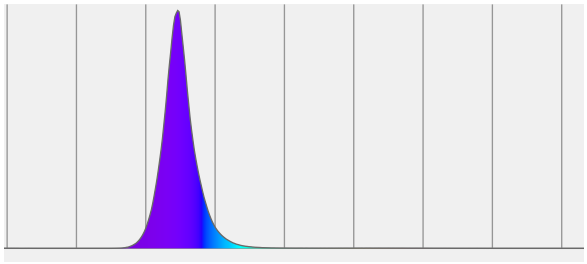
Voltage: 120 V, Current: 0.254 A

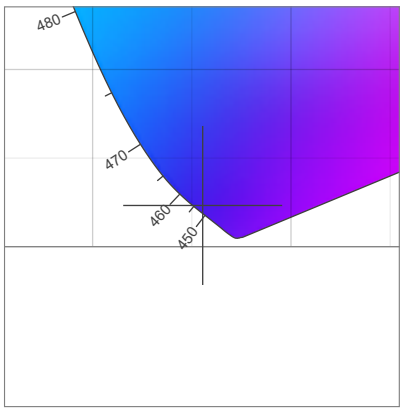




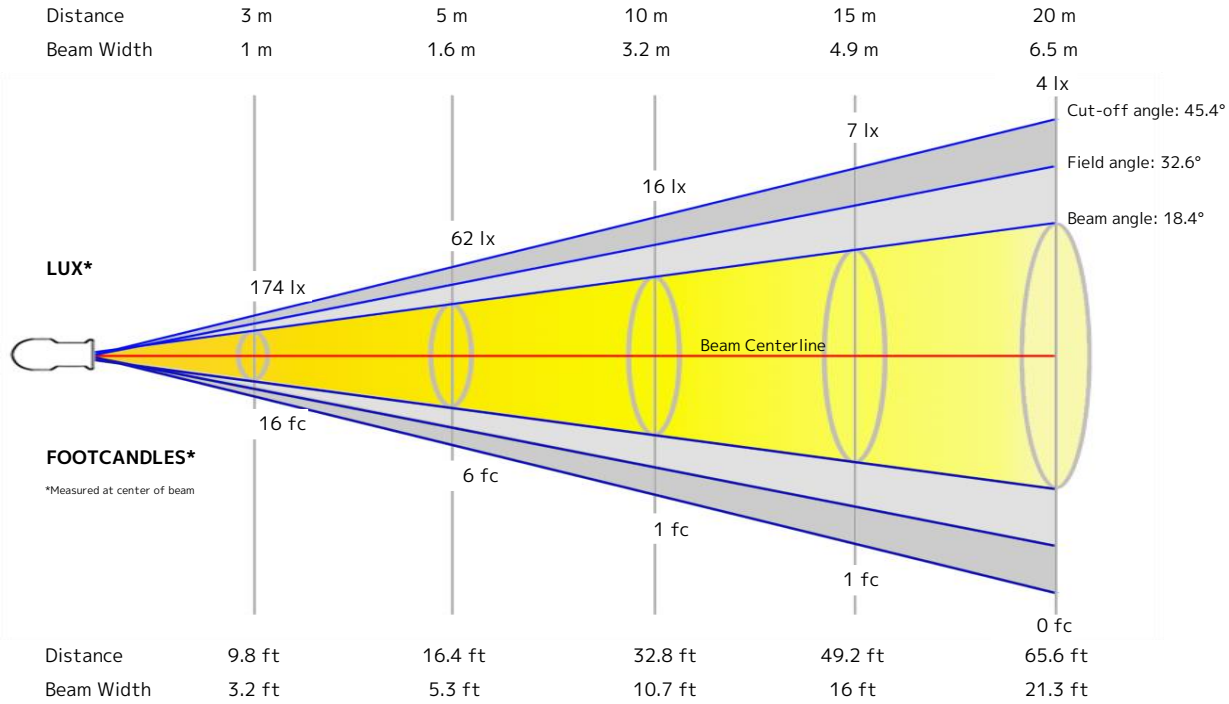
Spectral Power Distribution

Dominant Wavelength 453 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
453	0.155	0.023	0.210	0.047



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	1562	391	174	98	62	43	32	24	19	16	13	11	9	8	7	6	5	5	4	4
FC	145.2	36.3	16.1	9.1	5.8	4	3	2.3	1.8	1.5	1.2	1	0.9	0.7	0.6	0.6	0.5	0.4	0.4	0.4

Measurement Date: 8/14/2024

Measurements

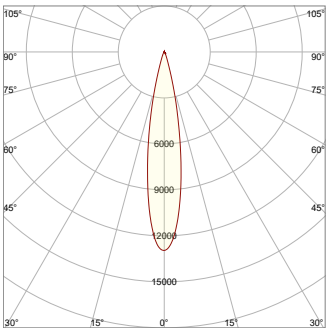
Total Lumen Output: 1695 lm

Peak Intensity: 12941 cd

Efficacy: 59 Lumen/Watt

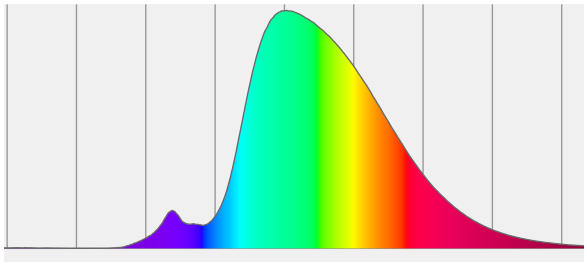
Power: 28.6 W

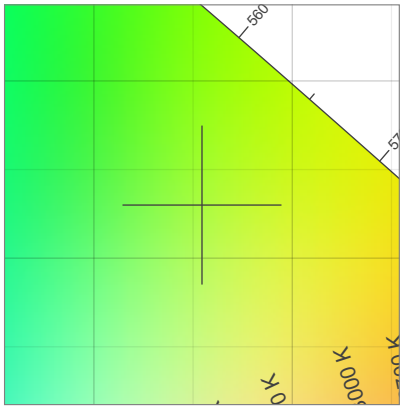
Voltage: 120 V, Current: 0.255 A



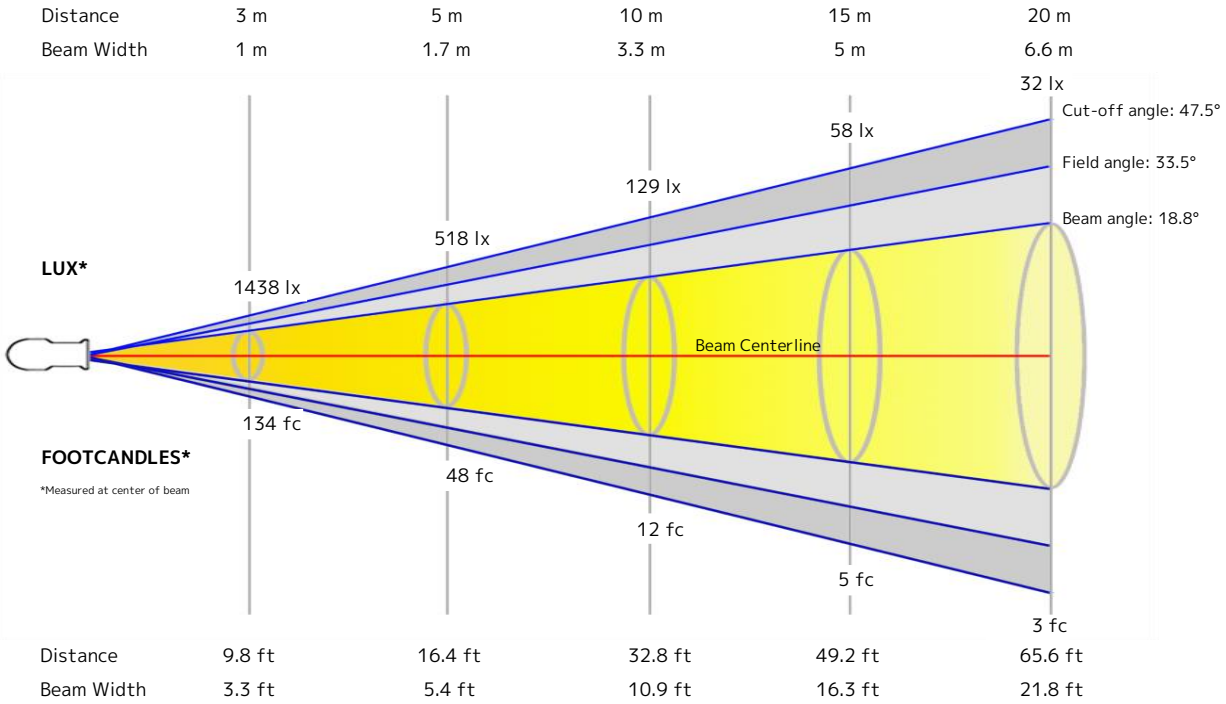
Spectral Power Distribution

Dominant Wavelength 560 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
560	0.354	0.530	0.164	0.368



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	12941	3235	1438	809	518	359	264	202	160	129	107	90	77	66	58	51	45	40	36	32
FC	1202.2	300.6	133.6	75.1	48.1	33.4	24.5	18.8	14.8	12	9.9	8.3	7.1	6.1	5.3	4.7	4.2	3.7	3.3	3

Measurement Date: 8/14/2024

Measurements

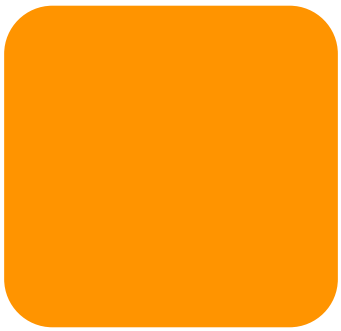
Total Lumen Output: 1107 lm

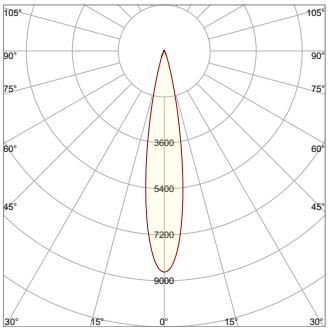
Peak Intensity: 8641 cd

Efficacy: 39 Lumen/Watt

Power: 28.4 W

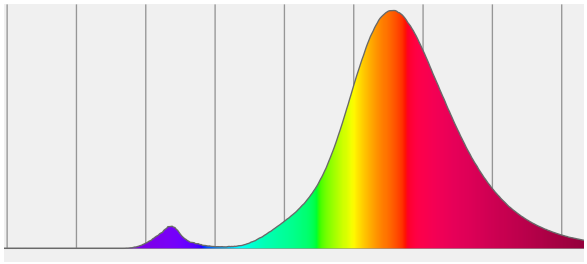
Voltage: 120 V, Current: 0.254 A

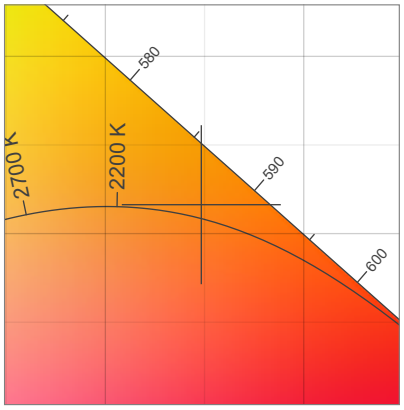




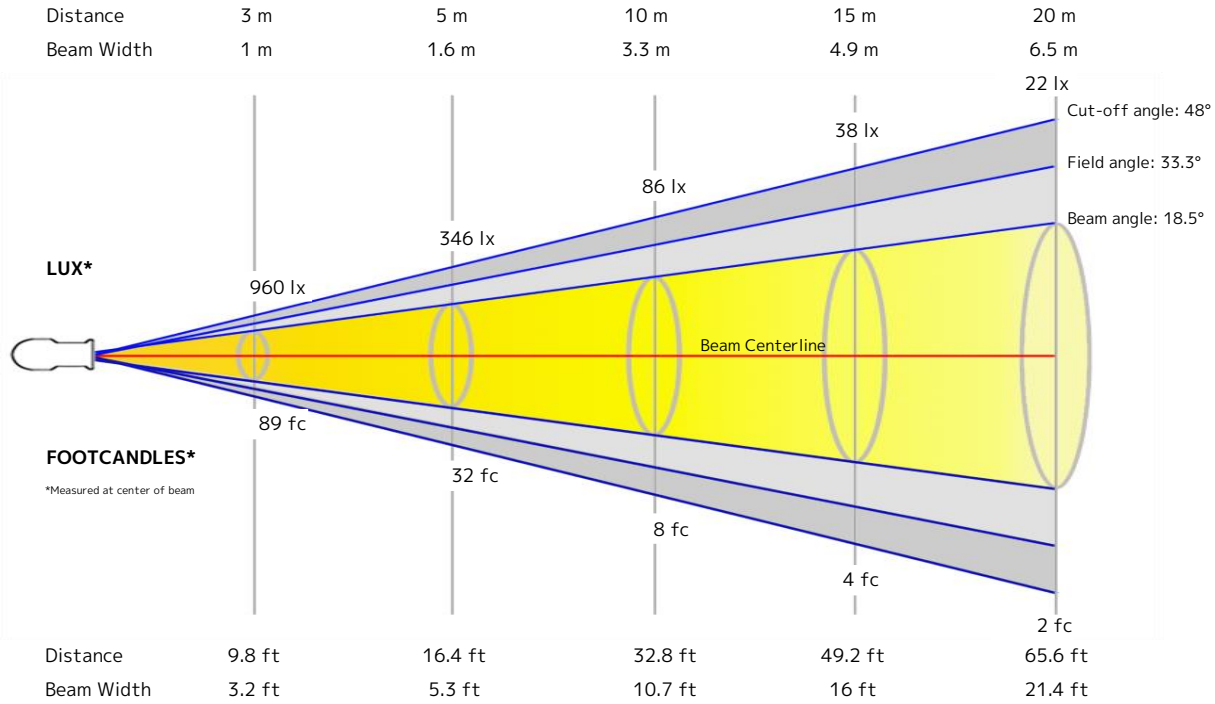
Spectral Power Distribution

Dominant Wavelength 590 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
590	0.548	0.416	0.318	0.362



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	8641	2160	960	540	346	240	176	135	107	86	71	60	51	44	38	34	30	27	24	22
FC	802.8	200.7	89.2	50.2	32.1	22.3	16.4	12.5	9.9	8	6.6	5.6	4.8	4.1	3.6	3.1	2.8	2.5	2.2	2

Measurement Date: 8/14/2024

Measurements

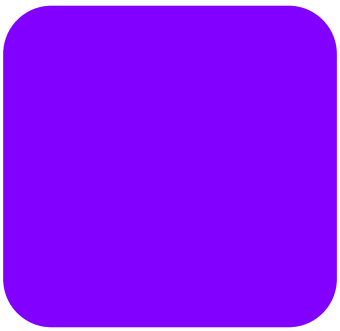
Total Lumen Output: 9.55 lm

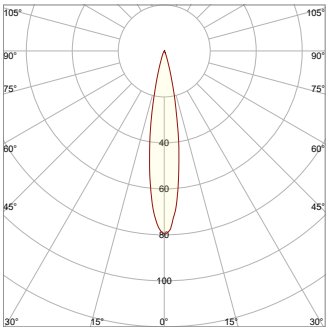
Peak Intensity: 79.5 cd

Efficacy: 1 Lumen/Watt

Power: 18.2 W

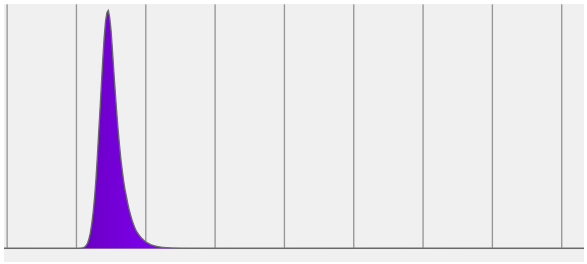
Voltage: 120 V, Current: 0.175 A

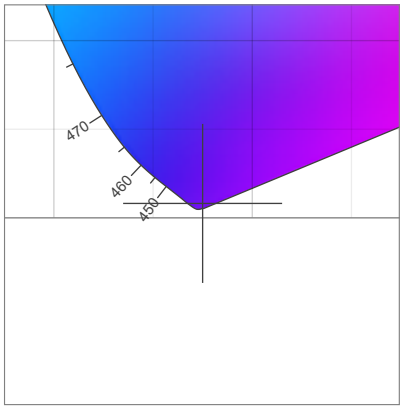




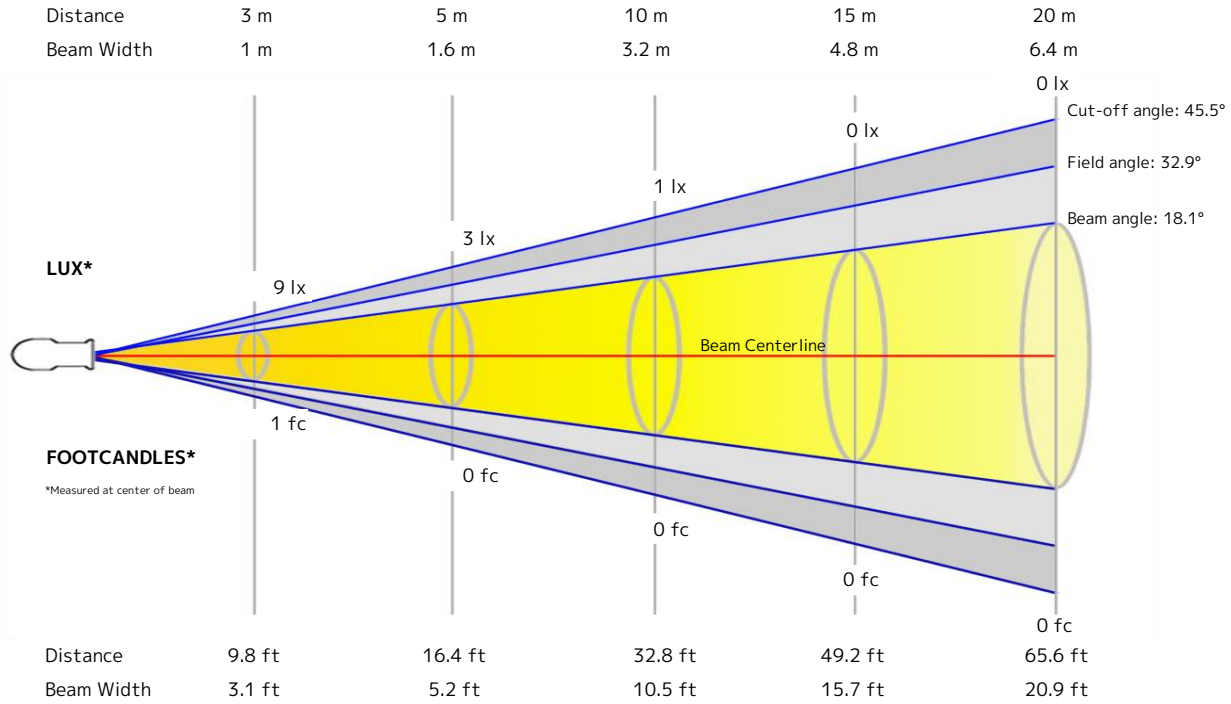
Spectral Power Distribution

Dominant Wavelength 394 nm





Dominant Wavelength	Color Coordinate CIE 1931	Color Coordinate CIE1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964
nm	x	y	u	v
394	0.175	0.008	0.255	0.018



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	80	20	9	5	3	2	2	1	1	1	1	1	0	0	0	0	0	0	0	0
FC	7.4	1.8	0.8	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0

Measurement Date: 8/14/2024